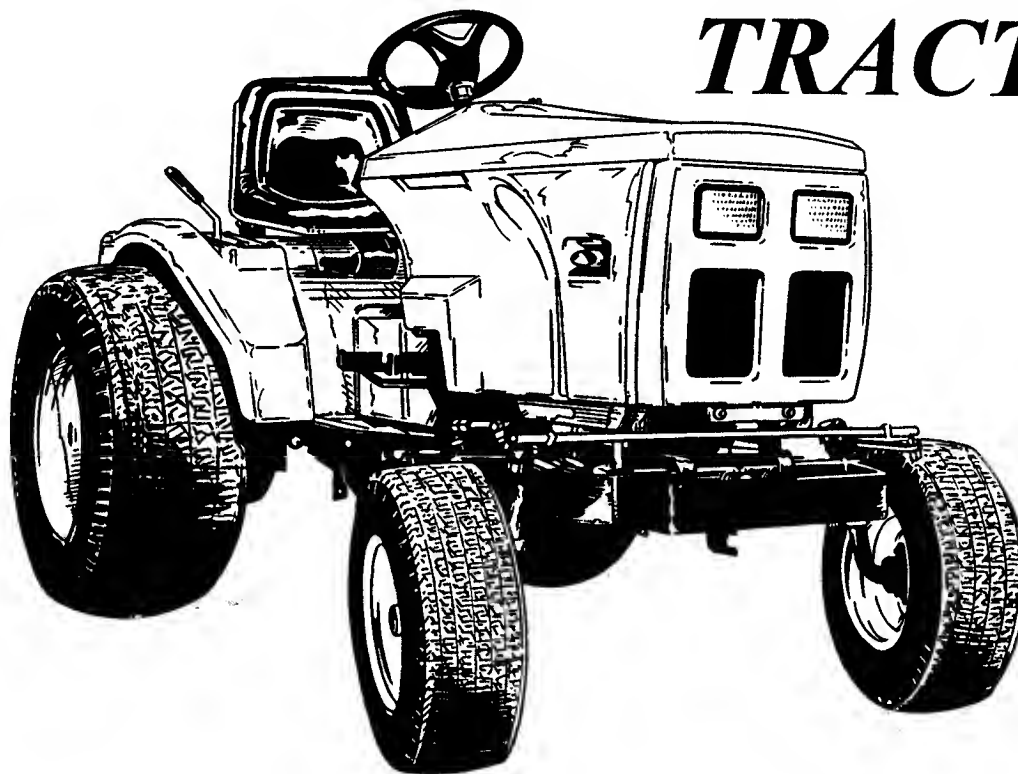


*Safety Instructions & Operator's Manual*

# **SNAPPER®**

## **MODEL MGT2000H GARDEN TRACTOR**



Thank you for buying a SNAPPER product! Before operating the Tractor, read and follow the "IMPORTANT SAFETY INSTRUCTIONS" on Page 3, all other instructions contained in this manual and the accompanying booklet "About Power Mower Safety". Lawn mowers and all power equipment, can be potentially dangerous if used improperly. *REMEMBER: SAFETY REQUIRES CAREFUL USE IN ACCORDANCE WITH INSTRUCTIONS AND COMMON SENSE.*

**SNAPPER** McDonough, GA., 30253 U.S.A.

*MANUAL No. 2-8575 (I.R. 3/95)*

# IMPORTANT SAFETY INSTRUCTIONS

**WARNING:** This powerful cutting machine is capable of amputating hands and feet and can throw objects that can cause injury and damage! Failure to observe the following **SAFETY** instructions could result in serious injury or death. Carefully read this manual and question your dealer if something is not clear. Should the dealer be unable to answer to your satisfaction, write or call the Customer Service Department at SNAPPER, McDonough, Georgia, 30253 (Phone 404-954-2500).

## PROTECTION FOR CHILDREN

1. **DO NOT** allow children in yard when machine is operated (even with the blade OFF).
2. **DO NOT** allow children to ride on machine or on attachments (even with the blade OFF).
3. **DO NOT** allow pre-teenage children to operate machine.
4. Only responsible teenagers with mature judgement shall be allowed to operate machine and only under close supervision.

## PROTECTION AGAINST TIPOVERS

1. **DO NOT** operate machine on slopes exceeding 15 degrees (27% grade).
2. On slopes above 10 degrees (18% grade), exercise extreme **CAUTION**. Turn blade OFF when traveling uphill, also reduce speed and avoid sharp turns.
3. Avoid uphill starts. If machine is stopped going uphill, turn blade OFF and back slowly down the slope.
4. **DO NOT** mow under any condition where traction or stability is doubtful without first test driving over the terrain with blade OFF.
5. Stay alert for holes and other hidden hazards. Keep away from ditches, washouts, culverts, fences and protruding objects.
6. **DO NOT** mow back and forth across face of slopes.
7. **KEEP A SAFE DISTANCE** (at least three feet) away from edge of ditches and other drop offs.

## OTHER IMPORTANT PRECAUTIONS

1. Read and follow operator's manuals and instructions furnished with attachments.
2. Only mature, responsible persons shall operate the machine.
3. Mount and dismount the machine from left side.
4. Wear appropriate protective clothing when mowing, such as, long pants and substantial footwear, not barefoot or with open sandals.
5. Practice operation of machine with blade OFF to learn controls and develop skill.
6. Persons under the influence of alcohol or drugs must **NOT** operate machine.
7. Know how to **STOP** blade and engine quickly in preparation for emergencies.
8. Keep people and pets a safe distance from machine.
9. Shields, deflectors, switches, blade controls and other safety devices must be in proper position and functional.

## OTHER IMPORTANT PRECAUTIONS

10. Clear area to be worked of wire, rocks and other objects that could cause injury if thrown by blade.
11. **STOP** blade, **STOP** engine and remove key when leaving machine.
12. **DO NOT** operate machine unless properly seated with feet on foot rests or pedal.
13. Keep hands and feet away from rotating blade underneath deck. Never place foot on ground while blade is ON or when machine is in motion.
14. Turn blade OFF, **STOP** engine and wait for blade to **STOP** before attempting to unclog grass or leaves to prevent loss of fingers or hand.
15. Blade must be switched OFF except when cutting grass. Set cutter in highest position when mowing over rough ground.
16. Deflector or grass catcher must be in position. Never point discharge at people, passing cars, windows or doors. Watch out for traffic when crossing or near roadways.
17. Operate in reverse only with careful observation of entire area behind the machine. **DO NOT** mow in reverse unless absolutely necessary.
18. Service machine and make adjustments only when engine is stopped.
19. Have machine serviced by an authorized SNAPPER dealer at least once a year and have the dealer install any new **SAFETY** devices.
20. Use only genuine SNAPPER replacement parts to assure that original standards are maintained.
21. Tighten all nuts, bolts and screws frequently, then check, adjust, repair or replace brakes as needed.
22. Lubricate machine at intervals specified in manual to prevent controls from binding.
23. Mow only in daylight or with good artificial light.
24. Handle gasoline with care! Never remove cap while engine is running. Fill tank outdoors only with engine **STOPPED** and cool. Clean spilled gasoline from machine. Store gasoline in approved container, out of the reach of children, in well ventilated, unoccupied building.
25. **DO NOT** change engine governor speed settings or overspeed engine.
26. Check grass catcher components frequently for signs of wear or deterioration and replace as needed to prevent injury from items going through weak or worn spots.
27. Exercise **CAUTION** when pulling loads. Limit loads to those you can safely control and attach loads to hitch plate as specified with SNAPPER attachment instructions.

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# Safety Information

## To obtain maximum benefit...

Proper maintenance and service are essential to obtaining the maximum benefit from your tractor. Follow the recommendations provided in this manual. Record the tractor's serial number in the space provided on the next page. Keep this manual readily accessible for referencing.

## Before operating the tractor...

It is the responsibility of the user to understand and perform proper operating procedures. Read this manual thoroughly and understand the use of the tractor completely before operating the tractor. Be aware of the dangers inherent in the use of this type of product. Read, understand, and follow all DANGER, CAUTION, and WARNING messages both in this manual and on the tractor.



**DANGER** - Indicates that serious injury or death WILL result if instructions are not followed.



**WARNING** - Indicates a strong possibility that serious injury or death could result if instructions are not followed.



**CAUTION** - Indicates a possibility that minor injury can result if instructions are not followed.



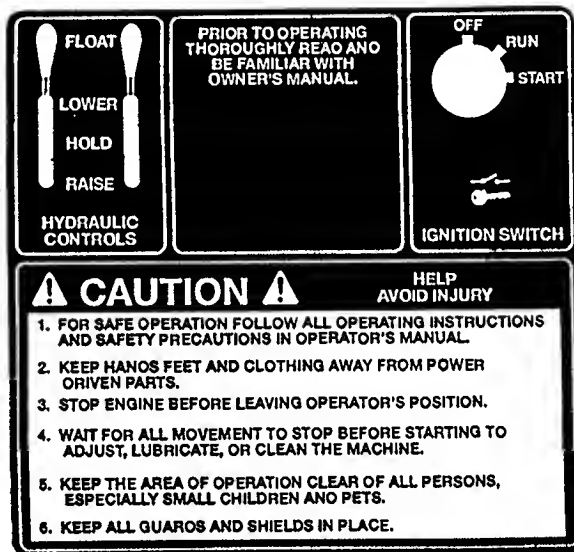
**IMPORTANT NOTICE** - Indicates that equipment or property damage can result if instructions are not followed.



Caution baffle removal  
(Located under hood on engine baffle)



Danger  
belt pulley



Lower console



Warning 3-point hitch (Located on frame at rear of tractor)

## Note

All rights are reserved to make changes without notice. Information and illustrations in this document are the most current available and are not binding in detail.

**IMPORTANT** note for owners living in California: The engine on this tractor is NOT equipped with a spark arresting muffler. Use of this equipment in grass, brush or forest land without properly maintained and functioning exhaust spark arrester is in violation of California State Law Section 4442 PRC.

## Familiarization

This Owner's Manual provides operational and maintenance instructions for the 1620HV/MGT2000H tractor. The 1620HV/MGT2000H is a twin cylinder engine hydrostatic drive garden tractor.

### Serial Number

The serial number of your tractor is located on the left-hand side of the frame as shown in the following diagram. Record it in the space provided below. This will be useful in ordering parts or accessories for the tractor.

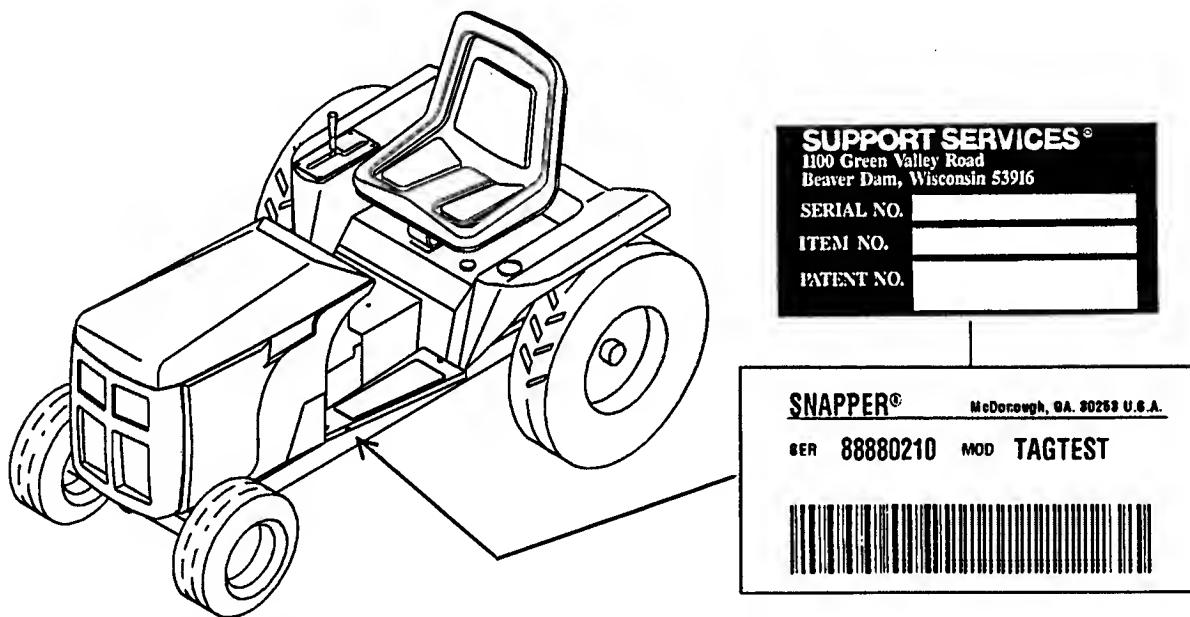


Figure 1. Location of serial number.

### Ordering Parts

When ordering parts it is necessary to provide the following information. Record your tractor's serial number in the space provided.

- Model number 1620HV/MGT2000H
- Serial number \_\_\_\_\_
- Part number \_\_\_\_\_
- Part name \_\_\_\_\_
- Part quantity \_\_\_\_\_

## Familiarization

The tractor controls and gauges are shown in Figures 2 through 8 and described as follows. Locate these controls on your tractor and know how to use them before operating the tractor.

Left-hand and right-hand sides of the tractor are on a person's left and right, respectively, when seated in the tractor facing forward.

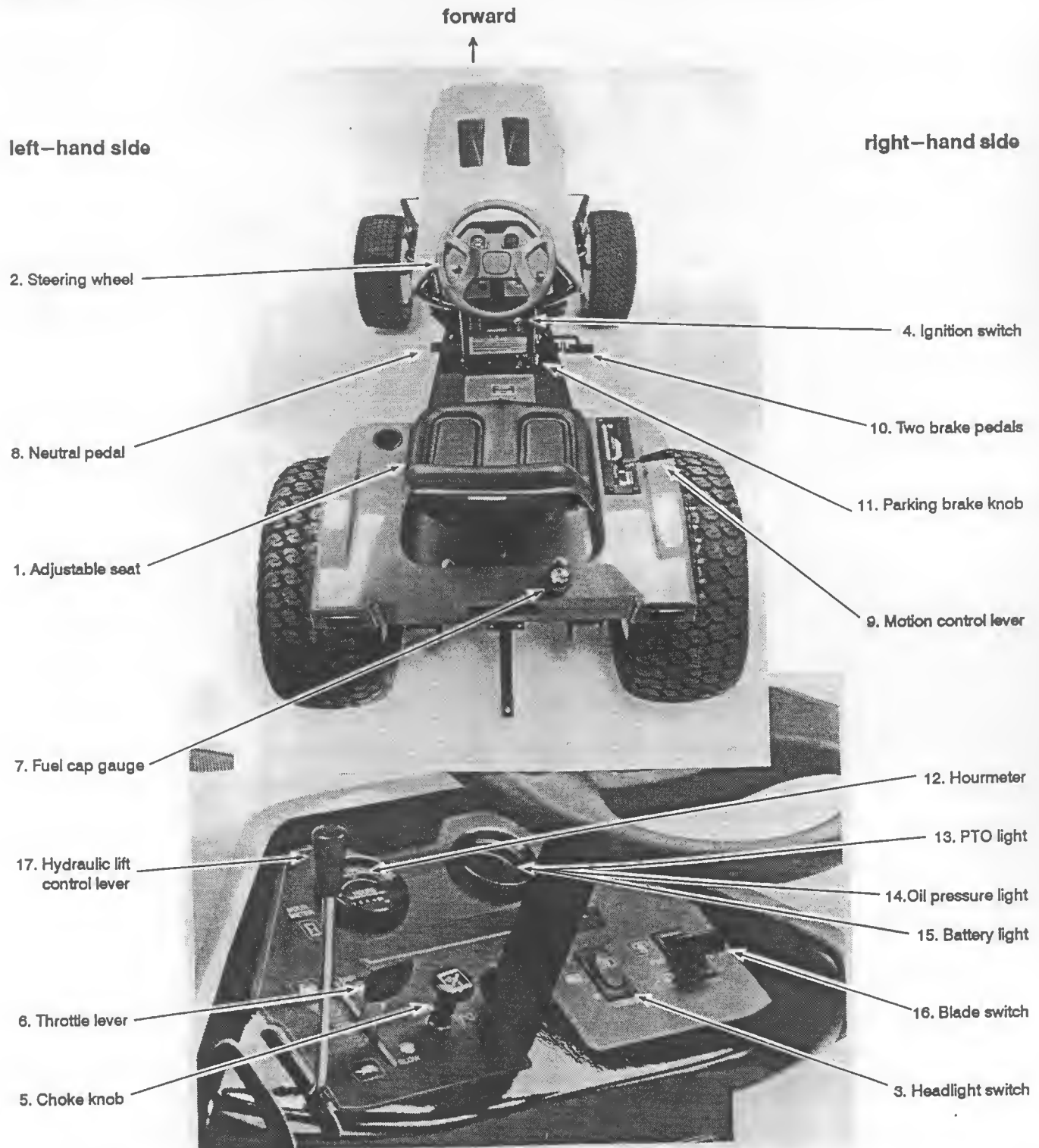


Figure 2. Operator controls.

# Tractor Controls

## Basic controls

1. **ADJUSTABLE SEAT** – moves forward or back, up to 3" (Refer to Figure 2).

Loosen two seat knobs on the seat support plate and slide seat assembly to suit. Tighten seat knobs.

2. **STEERING WHEEL** – controls the front wheels of the tractor for steering (Refer to Figure 2).

3. **HEADLIGHT SWITCH** – controls the tractor's headlights (Refer to Figure 2).

Push switch to '☰D' to turn headlights on. Push switch down to turn headlights off.

Note: The ignition switch must be "RUN" for headlights to light. Headlights go off when ignition switch is turned to the "OFF" position.

4. **IGNITION SWITCH** – starts and stops the engine. This is a 3-position, key-actuated switch (Refer to Figures 2 & 3).

Turn key to the "START" position to start engine. When released, the key automatically returns to the "RUN" position. Turn key to the "OFF" position to stop engine.

NOTE: Do not crank engine for more than 10 seconds. Refer to "Starting the engine" on page 10 in this manual.

5. **CHOKE KNOB** – provides richer fuel-air mixture in the engine's carburetor for cold starting (Refer to Figure 2).

Pull the knob out when starting the engine. Push it in shortly after engine begins to run. Refer to "Starting the engine in cold weather" on page 11 in this manual.

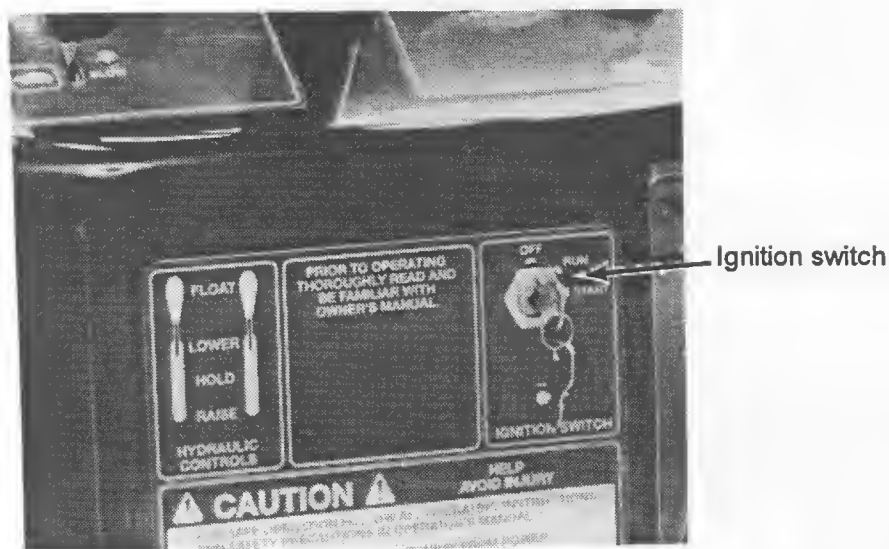


Figure 3. Ignition switch.



# Tractor Controls


## Basic controls (continued)

6. **THROTTLE LEVER** – controls the engine speed (Refer to Figure 2).

Move upward (toward rabbit) to increase engine speed (rpm). Move downward (toward turtle) to decrease engine speed.

Set lever midway between the fast position and slow position when starting engine.

Throttle speed requirements vary depending on the operation and the attachment being used. See the attachment manual for information or refer to “Tractor operation” starting on page 10 in this manual.



**WARNING: Gasoline is highly flammable.** Always stop the engine and turn off all electrical systems, including headlights, when dispensing fuel. Dispense fuel outdoors. **DO NOT** smoke or be near any flames or sparks while dispensing fuel. Replace fuel cap securely after dispensing fuel.

7. **FUEL CAP and GAUGE** – shows fuel level and unscrews for dispensing of fuel into tank (Refer to Figures 2 & 4). Use only unleaded, minimum octane 87 gasoline.

Always ensure that the small fuel cap breather hole is not clogged.

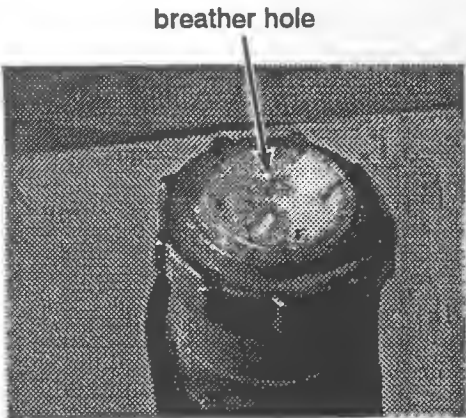


Figure 4. Fuel cap and gauge.

8. **NEUTRAL PEDAL** – puts the tractor in neutral. Fully depress the pedal to put the transmission (and speed & direction control lever) in neutral, slowing the tractor (Refer to Figures 2 & 5 and refer to “Tractor Operation” starting on page 10 in this manual).

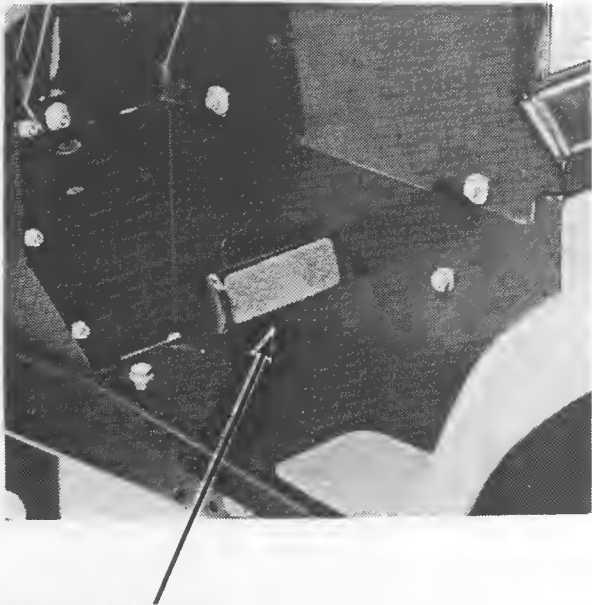


Figure 5. Neutral pedal.



# Tractor Controls

## Basic controls (continued)

9. **MOTION CONTROL LEVER** – hand operated to control the direction (forward/reverse) and speed of the tractor (Refer to Figures 2 & 6).

To put transmission in neutral – gently push/pull lever by hand or depress the neutral pedal, causing lever (and transmission) to go into neutral automatically.



**CAUTION:** Always put motion control lever in neutral before starting tractor, when slowing or stopping, and when leaving tractor unattended.

To drive forward – gently pull lever (out of neutral detent) and push toward front of tractor (0 – 7.4 mph).

To back up – gently pull lever (out of neutral detent) and push toward rear of tractor (0 – 3 mph).

10. **TWO BRAKE PEDALS** – control the brakes. The pedals are located on the right-hand side of the tractor. The **LEFT PEDAL** controls the left wheel the **RIGHT PEDAL** controls the right right wheel (Refer to Figures 2 & 6).

Always apply brakes gradually.

To slow or stop the tractor under normal operating conditions – depress both pedals together.

To assist turning with a heavy load, to make tight turns, or to enhance traction on ice or other poor tractive surfaces – depress each pedal individually.

11. **PARKING BRAKE KNOB** – latches the brake to lock the rear wheels. It is located on the right-hand side of the console (Refer to Figures 2 & 6).

### IMPORTANT NOTICE

**ALWAYS** lock the brakes when leaving tractor unattended.

To latch brake – Depress both brake pedals together. While pedals are depressed, pull up on parking brake knob, rotate it to right into short slot, and release. The parking brake is now engaged. If brakes do not latch, refer to “Troubleshooting” on page 14 in this manual.

To release brake – Depress both brake pedals together. While pedals are depressed, pull up on parking brake knob, rotate it to left into long slot, and release. The parking brake will disengage. If brakes do not release, refer to “Troubleshooting” on page 14 in this manual.

**NOTE:** When 1) the parking brake is latched, 2) the transmission is in neutral, and 3) the blade switch is “OFF”, the engine will continue running without operator being in seat

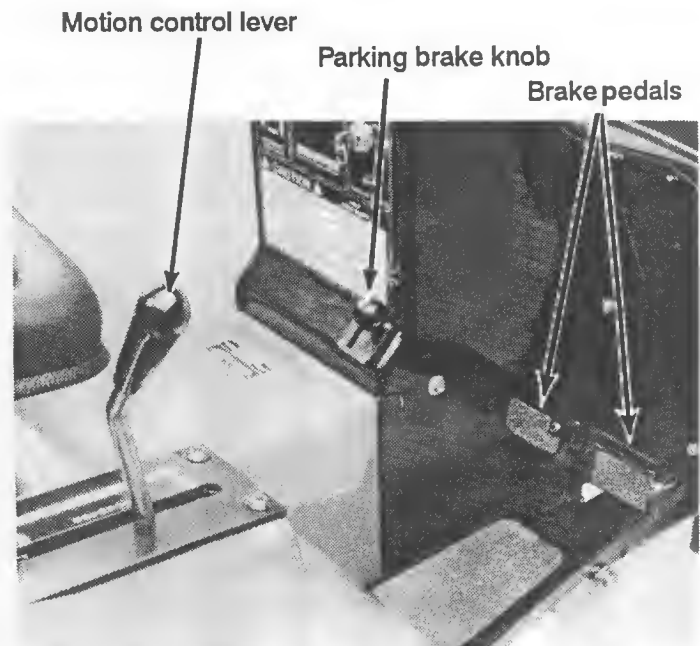


Figure 6. Motion control lever, brake pedals, and parking brake knob.

# Tractor Controls

## Console gauges

12. **HOURLMETER** – tells number of hours the tractor has operated. (Refer to Figures 2 & 7). It runs when ignition switch is “ON.” Do not leave ignition “ON” when engine is not running. Use hourmeter as a guide for when to do scheduled maintenance.

13. **PTO LIGHT** – illuminates when (optional) PTO is engaged. (Refer to Figures 2 & 7).

14. **OIL PRESSURE LIGHT** – signals low oil pressure when lit. (Refer to Figures 2 & 7). It illuminates momentarily when the ignition switch is “ON”, but the engine is not running (e.g., during starting sequence).

**IMPORTANT NOTICE**: The low oil pressure light should go off once the engine is running. If light remains on, shut engine off immediately. Refer to “Troubleshooting” on page 14 in this manual. Engine will fail if the problem is not resolved.

15. **BATTERY LIGHT** – illuminates when battery is discharging. (Refer to Figures 2 & 7). It lights momentarily during starting sequence. It should be off when the engine is running above idle. If not, shut engine off and refer to “Troubleshooting” on page 15 in this manual.

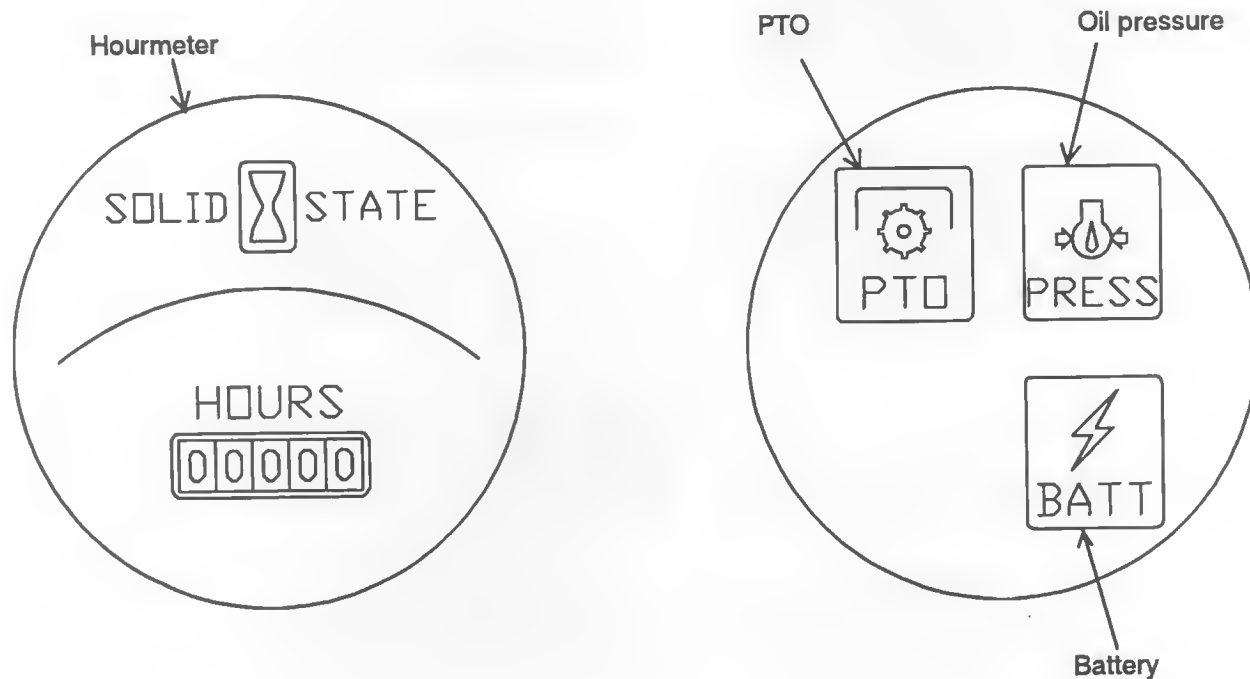


Figure 7. Console gauges.

# Tractor Controls

## Attachment controls

All rotary attachments are controlled by an electric clutch/power take off system. All front, middle, and rear attachments are raised and lowered by the standard hydraulic lift system. An optional auxiliary lift system allows independent operation of rear attachments.

**IMPORTANT NOTICE:** ALWAYS lower implements fully to the ground when leaving tractor unattended.

**16. BLADE SWITCH** – starts and stops the electric clutch on the front of engine for the power take off (PTO). The electric clutch drives all rotary implements. (Refer to Figures 2 & 8)

The electric clutch engages when the blade switch is pulled down and lifted to the “ON” position. The electric clutch disengages when the switch is lowered to the “OFF” position.

**17. HYDRAULIC LIFT CONTROL LEVER** – controls all attachments. It is linked to a hydraulic control valve. (Refer to Figures 2 & 8)

To lower the front and rear implements – push the lever partially forward. When the lever is released it returns to its center (hold) position. The attachments “hold” their lowered positions.

To raise the front and rear implements – pull the lever to the rear. When the lever is released, it returns to its center (hold) position. The attachments “hold” their raised positions.

To float the implements (seek their own best operating levels) – push the lever fully forward through a slight detent. When the lever is released, it remains in the forward position until pulled out of its detent.

### Lever control

- ↑ implements float
- ↑ implements lower
- implements hold
- ↓ implements raise

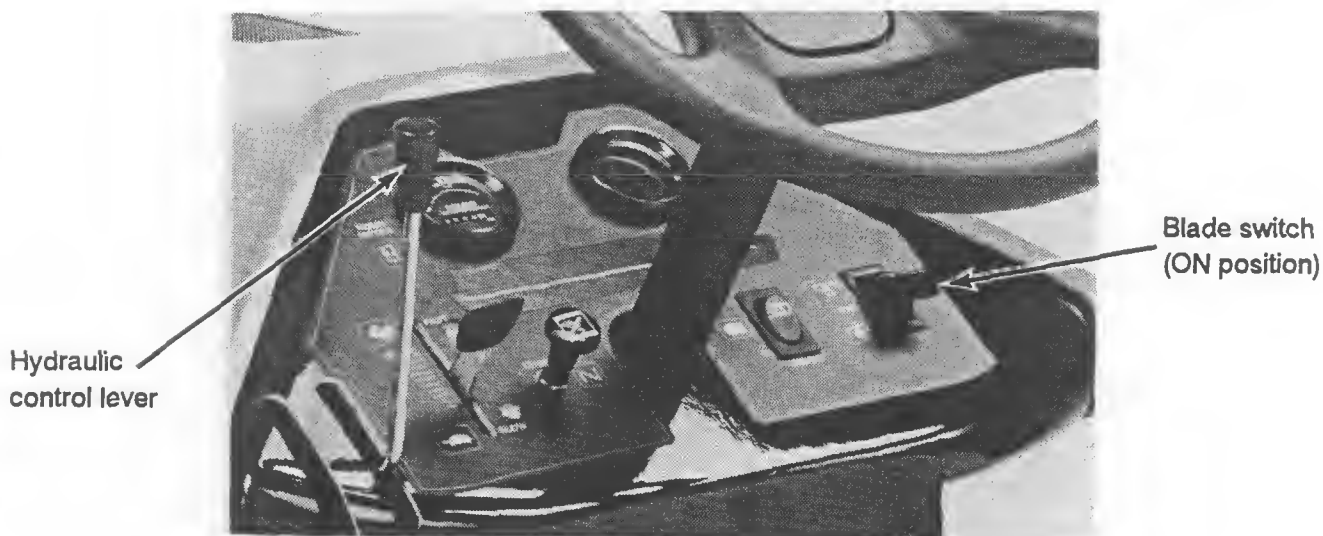


Figure 8. Hydraulic control lever and blade switch.

# Tractor Operation

**IMPORTANT:** BEFORE starting or operating the tractor, READ all manuals and UNDERSTAND the operation of all tractor controls and attachments. FOLLOW all safety messages.

## While driving the tractor



1. Stay alert for holes and other hidden hazards. Keep away from ditches, washouts, culverts, fences and protruding objects.
2. DO NOT operate machine on slopes exceeding 15° (27% grade). On slopes above 10° (18% grade) exercise extreme CAUTION. Turn attachments OFF when traveling uphill. Also reduce speed and avoid sharp turns.
3. When operating on slopes greater than 10° use front and rear wheel weights and low speed ranges. Do not operate machine on slopes greater than 15°.
4. When pulling loads use front wheel weights or front weight rack with counterweights. Use low speed ranges and apply power slowly. Pull from frame mounted towbar only. Do not pull from any other place on the tractor frame.
5. Never dismount until tractor is stopped, all power shut off, and parking brake lever engaged.
6. Never leave the tractor unattended with the engine running.
7. Never leave the ignition key in an unattended tractor.
8. Do not disconnect any safety interlocks. They are provided for the protection of the operator, especially when his or her attention may be momentarily distracted.

## Starting the engine

1. Ensure that the fuel shutoff valve on the bottom side of the fuel tank is open (vertical). (Refer to Figure 9)

**NOTE:** Safety interlocks prevent the tractor from starting when steps 2, 3, and 4 are not done.

2. Be seated in the tractor.
3. Ensure that the motion lever is in neutral.
4. Make sure blade switch is in the "OFF" position (down).
5. Set the throttle lever about halfway between slow (turtle) and fast (rabbit).
6. Pull the choke knob out.

### **IMPORTANT NOTICE:**

To prevent overheating of the starting motor, limit continuous cranking to 10 seconds. Allow a full 60 second delay before attempting to re crank. If there is a false start, the engine must be completely stopped before making another attempt at starting.

7. Turn the ignition key to "START" and release it immediately after the engine starts. Push choke in halfway.
8. After engine is warm push choke in all the way. Then push throttle lever down until engine just idles.

Fuel shutoff valve



**Figure 9. Fuel shutoff valve**

# Tractor Operation

## Starting the engine in cold weather

1. Use lighter oil. See Engine manual for correct oil usage. Do not use starting fluids. Keep the battery fully charged (cranking power is greatly reduced at low temperatures).
2. Follow the procedure for "Starting the engine" except allow the engine to warm up before pushing the choke in.

To drive backward – from neutral, slowly push the motion control lever back toward rear of tractor.

NOTE: A safety interlock switch stops the engine and attachment if the operator leaves the tractor seat without pushing the blade switch to "OFF" and locking the brakes.

## Starting the tractor, driving the tractor, and operating attachments



**WARNING:** Check to be sure that the area around the tractor and attachment, and in the path you intend to travel, is clear of people, pets, and other obstacles.

Tractor ground speed and engine speed requirements vary depending on operating conditions and the attachment being used.

1. If a PTO driven attachment is being used increase engine rpm (push throttle) to half speed. Engage the electric clutch (turn blade switch "ON").

After both engine and PTO attachment are running, operate throttle to gradually increase engine rpm up to operating speed.

Engine speed below half throttle is not recommended while PTO driven attachments are engaged. Refer to the attachment manual for recommended operating speed. Refer also to "Attachment controls" on page 9 in this manual.

To drive forward – from neutral, slowly push the motion control lever forward toward front of tractor.

## Brake operation

To latch brake – Depress both brake pedals together. While pedals are depressed, pull up on parking brake knob, rotate it to right into short slot, and release. The parking brake is now engaged. If brakes do not latch, refer to "Troubleshooting" on page 14 in this manual.

To release brake – Depress both brake pedals together. While pedals are depressed, pull up on parking brake knob, rotate it to left into long slot, and release. The parking brake will disengage. If brakes do not release, refer to "Troubleshooting" on page 14 in this manual.

**IMPORTANT NOTICE:** Always put the speed and direction control lever in neutral, lower the attachments, lock the brake, and remove the key before leaving the tractor.

## Tractor Operation

### Pushing the tractor by hand – bypass valves

When the tractor is pushed by hand or rolled, the appropriate “FWD” (forward) or “REV” (reverse) bypass valve must be pushed down and held down while the tractor is moving. (Refer to Figure 10)

Insert a small screwdriver or similar object into the desired actuator hole and depress the valve actuator. Hold down while hand-pushing the tractor.

### Towing

Towing the tractor is not recommended. The back wheels must be off the ground or the transmission can be severely damaged. If the tractor must be moved long distances, load it onto a trailer.

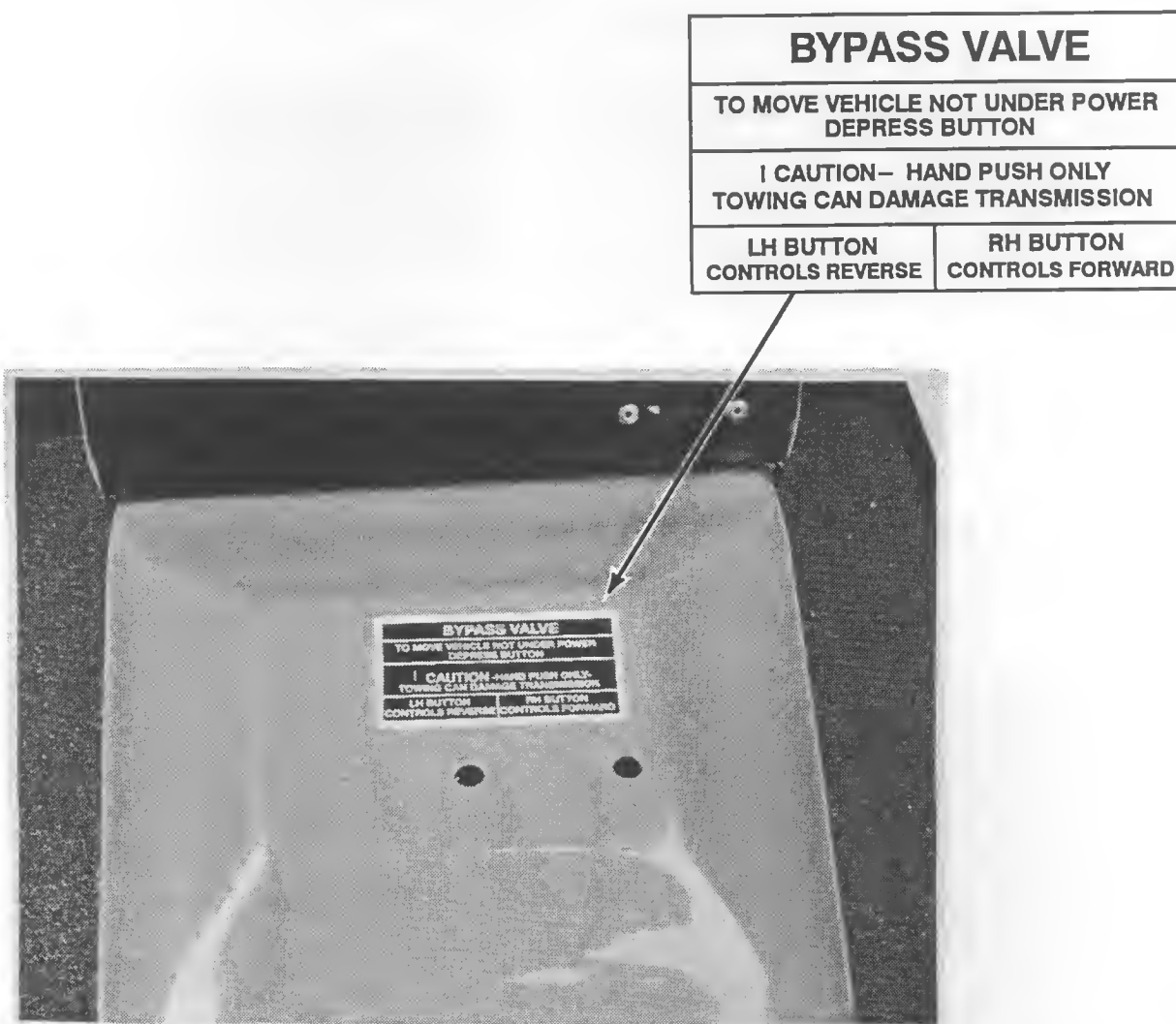


Figure 10. Bypass valves.

# Troubleshooting

Malfunction	Probable Cause	No	Yes	Corrective Action	Ref.
<b>Engine will not turn over</b>	1. Improper starting	Go to #2	→	1. Check starting procedure.	Pg. 10
	2. Dead battery	Go to #3	→	2. Charge battery or replace.	Pg. 20
	3. Blade switch on.	Go to #4	→	3. Push blade switch down.	Pg. 9
	4. Operator not seated	Go to #5	→	4. Operator must be seated.	Pg. 10
	5. Open electrical circuit.	Go to #6 Corrective Action	→	5. Check for blown fuse, loose connections, broken wires or grounded leads.	Pg. 21
				6. Contact your authorized dealer.	—
<b>Engine will turn over but will not start.</b>	1. Empty fuel tank	Go to #2	→	1. Fill tank	—
	2. Seat safety switch open.	Go to #3	→	2. Operator must be seated	Pg. 10
	3. Fuel shutoff valve closed.	Go to #4	→	3. Open shutoff valve.	Pg. 10
	4. Faulty spark plug.	Go to #5	→	4. Remove and check spark plug	Pg. 25
	5. Faulty ignition connections.	Go to #6	→	5. Check for disconnected lead wires.	Pg. 21
	6. Air cleaner clogged.	Go to #7	→	6. Clean element.	Pg. 23
	7. Engine flooded (strong fuel odor).	Go to #8 Corrective Action	→	7. Push choke in and try again.	Pg. 10
				8. Contact your authorized dealer.	—
<b>Engine starts but stalls in a few seconds.</b>	1. Fuel tank empty.	Go to #2	→	1. Fill tank	—
	2. Fuel shutoff valve closed.	Go to #3	→	2. Open shutoff valve.	Pg. 10
	3. Incorrect idle adjustment.	Go to #4	→	3. Adjust carburetor.	*
	4. Engine too cold.	Go to #5	→	4. Leave choke partially pulled out until engine warms up.	Pg. 10
	5. Drive train lubricants too cold.	Go to #6	→	5. Run in neutral or use low gear setting until warm.	Pg. 10
	6. Faulty fuel relay.	Go to #7 Corrective Action	→	6. Replace fuel relay.	—
				7. Contact your authorized dealer.	—
<b>Engine Idles poorly.</b>	1. Idle speed too slow.	Go to #2	→	1. Adjust idle speed.	*
	2. Idles improperly	Go to #3	→	2. Check idle fuel adjustment.	*
	3. Faulty spark plug.	Go to #4 Corrective Action	→	3. Check spark plug.	Pg. 25
				4. Contact your authorized dealer.	—
<b>Engine overheats.</b>	1. Engine screen or cooling fins clogged.	Go to #2	→	1. Clean out debris.	Pg. 24
	2. Oil level too high or too low.	Go to #3	→	2. Check oil level.	Pg. 24
	3. Fuel mixture too lean.	Go to #4	→	3. Adjust carburetor.	*
	4. Engine overload.	Go to #5 Corrective Action	→	4. Reduce load. Allow engine to cool.	—
				5. Contact your authorized dealer.	—

— Contact your nearest dealer for assistance.

\* Refer to the engine manufacturer's Owner's Manual for more information.



# Troubleshooting

Malfunction	Probable Cause	No	Yes	Corrective Action	Ref.
<b>Engine "Oil" pressure light on.</b>	1. Low oil level.	Go to #2	→	1. Check and add oil.	Pg. 24
	2. Excessive slope operation.	Go to #3	→	2. See "Safety" section.	T. O. C.
	3. Engine not running.	Go to #4	→	3. Normal momentarily.	Pg. 8
		Corrective Action		4. Contact your authorized dealer.	—
<b>Engine continues to run when turned off.</b>	1. Defective wiring or ignition switch.	Go to #2	→	1. Pull choke knob out to flood engine. Check wiring and connections to engine. Check ignition switch circuit through switch.	Pg. 10
				2. Contact your authorized dealer.	—
<b>One or both headlights do not light.</b>	1. Ignition switch off.	Go to #2	→	1. Turn ignition key to "On".	Pg. 10
	2. Open electrical circuit.	Go to #3	→	2. Check fuses.	Pg. 21
	3. One or both lamps out.	Go to #4	→	3. Replace bulbs.	Pg. 21
	4. Dead battery.	Go to #5	→	4. Charge battery or replace.	Pg. 20
	5. Loose connection or broken or grounded wire.	Go to #6	→	5. Check wiring and connections between ignition switch, light switch and lights.	Pg. 21
	6. Defective light switch.	Go to #7	→	6. Replace light switch.	—
<b>Electric clutch malfunction.</b>		Corrective Action		7. Contact your authorized dealer.	—
	1. Loose connection.	Go to #2	→	1. Check connections and fuses.	Pg. 21
	2. Out of adjustment.	Go to #3	→	2. Readjust.	Pg. 22
	3. Defective blade switch.	Go to #4	→	3. Replace switch.	—
	4. Defective electric clutch.	Go to #5	→	4. Replace electric clutch.	—
<b>Tractor "creeps" when motion control lever is in neutral.</b>		Corrective Action		5. Contact your authorized dealer.	—
	1. Linkage out of adjustment.	Go to #2		1. See your dealer about adjustment.	—
		Corrective Action		2. Contact your authorized dealer.	—
<b>Motion control lever not firmly seated.</b>					
	1. Neutral brake out of adjustment	Go to #2	→	1. See your dealer about adjustment.	—
<b>Excessive differential or final drive noise.</b>		Corrective Action		2. Contact your authorized dealer.	—
	1. Loss of lubricant.	Go to #2	→	1. Add oil as required, check for leaks	Pg. 29
<b>Brakes ineffective (If brakes won't kill engine but do stop forward motion, they are normal.)</b>		Corrective Action		2. Contact your authorized dealer.	—
	1. Out of adjustment.	Go to #2	→	1. Adjust brake at clevis.	Pg. 18
	2. Worn brake band.	Go to #3	→	2. Replace brake band.	—
	3. Oil in brake band.	Go to #4	→	3. Clean or replace.	—
		Corrective Action		4. Contact your authorized dealer.	—

# Troubleshooting

Malfunction	Probable Cause	No	Yes	Corrective Action	Ref.
<b>Hydraulic lift does not work properly.</b>	1. Low oil level.	Go to #2	→	1. Check and fill to 3" from top.	Pg. 28
	2. Worn hydraulic valve, hydraulic lift cylinder, or transmission charge pump.	Go to #3	→	2. See dealer for replacement.	—
	3. Pinched or broken hose.	Go to #4	→	3. Correct or replace.	Pg. 27
		Corrective Action		4. Contact your authorized dealer.	—
<b>No power steering.</b>	1. Worn power steering unit.	Go to #2	→	1. See dealer for replacement.	—
	2. Worn power steering cylinder.	Go to #3	→	2. See dealer for replacement.	—
	3. Worn transmission charge pump.	Go to #4	→	3. See dealer for replacement.	—
	4. Low oil level.	Go to #5		4. Check and fill hydraulic tank to recommended level.	Pg. 28
	3. Pinched or broken hose.	Go to #6		5. Correct or replace.	Pg. 27
		Corrective Action		6. Contact your authorized dealer.	—
<b>Battery light does not go out.</b>	1. Bad or corroded battery cables.	Go to #2	→	1. Clean or replace battery cables.	Pg. 20
	2. Bad test timer module.	Go to #3	→	2. Replace test timer module.	—
	3. Bad battery.	Go to #4	→	3. Check battery or replace if necessary.	Pg. 19
	4. Malfunction in charger system.	Go to #5	→	4. See your dealer.	—
		Corrective Action		5. Contact your authorized dealer.	—

# Maintenance

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## General

Maintaining and cleaning the tractor will help keep it in prime safety and operating condition. Detailed instructions on how to service the tractor are on the following pages. Perform the maintenance as recommended. For future reference keep a log, on page 63, of when maintenance was done.



### WARNING



Before performing maintenance on the tractor, put the motion control lever in neutral, ensure blade switch is off, fully lower the attachment, lock the brake, and turn off engine. Failure to do so could result in personal injury or even death.

## Maintenance summary

The summary below shows when to service the tractor under normal conditions. The tractor's hourmeter tells the number of hours the tractor has been used. Service may need to be done more frequently, especially under unusual conditions, such as heavy dirt, dust, etc.

### Check before every use...

- belts
- engine oil
- fasteners
- fuel level
- guards & shields
- hydraulic oil

### Check every 25 hours...

- air cleaner (clean)
- battery
- brakes
- engine cooling fins
- fittings (grease)
- hydraulic hoses & fittings
- tire pressure

### Check during and after every use...

- air cleaner
- air intake screens
- hydraulic oil coolers

### Check every 100 hours...

- air cleaner (change)
- differential (lube)
- engine air intake/cooling system (clean)
- engine oil & filter (change)
- final drive (lube)
- fuel filter (change)
- fuel screen (clean)
- hydraulic oil filter (change)
- spark plugs (change)
- wheel bearings (pack)

### Check after first 5 hours...

- battery
- engine oil & filter (change)
- fittings
- hydraulic oil

# Maintenance

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## Fuel, oils, grease, and lubricants

Battery water . distilled water

Differential lube . . 80/90 gear lube - 2 pints

Engine oil 10W30 year-round above 32° F - 2 qts.  
5W30 below 32° F

Final drive lube . . 80/90 gear lube - 1.5 pints each

Fitting grease . lithium based grease

Fuel . . unleaded gasoline, 87 min. octane - 8.25 gals.

Hydraulic oil . . Dextron II hyd. oil - 2.25 gals.

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## Belts

Check the attachment drive belts periodically for wear, cuts, breaks, and frayed conditions. Replace worn or damaged belts. Clean only with a clean, dry cloth.

For details on replacing attachment belts refer to the attachment manuals.

## Body

The rear fender, hood, front grille and side panels which make up the body are made of fiber reinforced plastic.

Repair parts can be ordered from your Dealer. Maintenance and cleaning supplies can be obtained at automotive parts dealers or discount store automotive departments.

### Cleaning the body

Keep the tractor free of debris, dirt, and grease. Remove mud, ice, or snow after use to prevent hardening or freezing.

Be sure side screens are clear. Cleaning may help in the discovery of minor discrepancies before they become troublesome.

Use only a car wash soap to wash. Never use dish or laundry soap as it will remove wax.

Use a premium paste wax on hood, body, and dash areas every six months in order to maintain a smooth surface finish and color (more frequently in extreme conditions). Use "rubbing" compound to remove small scratches.

## Removing the body

In some instances, removal of the body facilitates cleaning, lubrication, and adjustments. Generally, removal is not necessary. If removal is desired follow these steps:

### Side panels

1. Raise the hood by pulling it up from the edge that is closest to the steering wheel.
2. Each side panel is secured at the top with two cam-locs. Flip the cam-locs out. Turn them 90°, aligning them with the slots in the side panel. Lift panel off.

### Hood

3. The hood is secured to the tractor with two prop rods. Remove the prop rods from the interior support structure by loosening the nuts from the hinge clips. Lift hood, with prop rods attached, from the tractor.

### Front grille

4. The front grille is secured to the tractor with screws, washers, and nuts. Loosen these items.
5. Ensure that the right side panel is removed as explained in steps 1 and 2.
6. Disconnect the headlight wires at the main wiring harness (on right side, near console). Remove screws, washers, and nuts. Carefully remove grille, pulling headlight wires through opening.

# Maintenance

## Brakes

The tractor is equipped with two individually controlled rear wheel brakes. The brake system was pre-adjusted at the factory for maximum braking efficiency.

The brakes should be checked after 25 hours of tractor operation, or sooner if necessary. The brakes are connected to actuating arms at the rear of the tractor.

### Checking

Depress one of the pedals. There should be approximately  $\frac{1}{2}$ " of free travel on the pedal before resistance is encountered. This means the brake bands are tight on the drum. If free travel is excessive or in excess refer to the adjusting procedure.

The pedal may be depressed another three or four inches but this will merely compress the override spring. Little or no additional pressure will be brought to bear on the drum.

### Adjusting

When adjustment becomes necessary, the brake for each wheel should be adjusted separately. Refer to Figure 11 and do the following steps:

1. Loosen the locking nuts (Item 26A) located forward of the clevis (Item 4).
2. Adjust nut (Item 26B) to obtain the desired free travel. Adjusting the nut rearward, against the clevis (Item 4), will loosen the brake band. Adjusting the nut forward, away from the clevis, will tighten the brake band.
3. Tighten locking nut (Item 26A) against adjustment nut (Item 26B) to secure nuts.
4. Adjust the override spring nut (Item 17) located behind override spring (Item 14) inside clevis (Item 4). Nut should be adjusted so override spring is approximately  $2\frac{1}{4}$ " in length.
5. Follow the same procedure for the brake on the other side of the tractor. Recheck free travel and parking latch engagement.

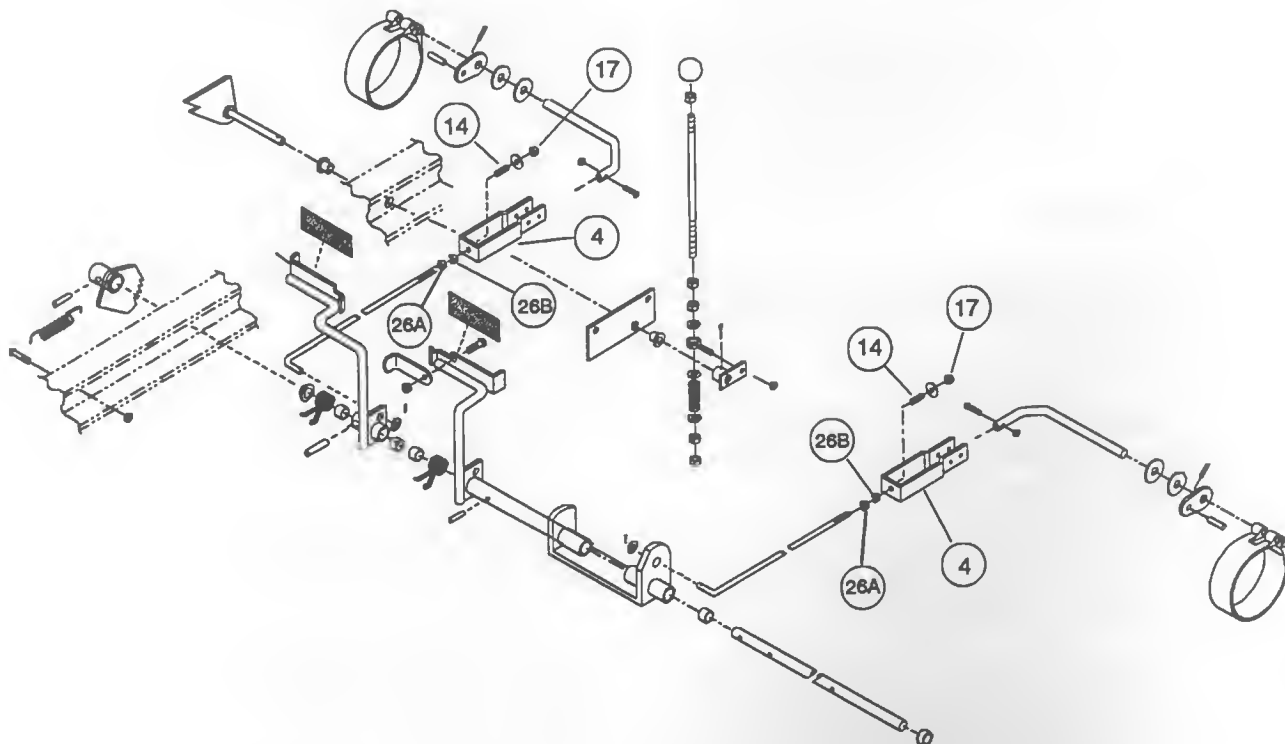


Figure 11. Brake adjustment

# Maintenance

## Electrical system



**WARNING:** Before checking or servicing any part of the electrical system, first disconnect the black (-) battery cable. Then disconnect the red (+) cable. Failure to do so could cause severe burns.

## Battery



**WARNING:** Dangerous Acid, Explosive Gases. DO NOT smoke or light a match near the battery! Hydrogen gas may be present and is explosive. Batteries contain sulfuric acid. Keep batteries and acid out of reach of children. Avoid contact with skin, eyes, and clothing. Flush immediately with water for 15 minutes if acid splashes on skin. Seek medical help.



**WARNING:** Batteries produce explosive hydrogen gas while being charged. Ventilate the area when charging the battery. Keep cigarettes, sparks, open flame, and other sources of ignition away at all times.



**WARNING:** Remove all jewelry when working on battery. Failure to do so could result in severe burns.

## Checking the battery

The battery should be checked every 25 hours of operation or once a week, whichever is less.

Battery cables are color-coded. Remember that to:

\*Remove the clamps: black (-) is first.

\*Connect the clamps: black (-) is last.

To check the battery:

1. Open hood. The battery is located directly behind console. First disconnect the black (-) battery cable first. Then disconnect the red (+) battery cable.
  2. Being VERY CAREFUL not to splash liquid, remove the filler caps.
  3. The electrolyte level should be at the bottom of the filler tubes. If the electrolyte is low, add clean distilled water. Do not overfill.
- In freezing weather run the engine briefly after adding water. This mixes the water and electrolyte and prevents freezing.
4. Clean corrosion and dirt from cables, connections, and top of battery. Refer to "Cleaning the battery" on page 20 in this manual. Dirt and corrosion can cause self-discharging of battery. Apply a coat of a corrosion preventative to terminals.
  5. Connect the red (+) battery cable first. Then connect the black (-) cable. Tighten battery connections. Keep connections tight at all times to prevent arcing, pitting of connections, and eventual battery failure.

# Maintenance

## Electrical system (continued)

### Battery (continued)

#### Removing the battery



**WARNING: Dangerous Acid, Explosive Gases. DO NOT smoke or light a match near the battery! Keep batteries and acid out of reach of children. Avoid contact with skin, eyes, and clothing. Flush immediately with water for 15 minutes if acid splashes on skin. Seek medical help.**

1. Raise the hood and locate battery and cables.
2. Remove both side panels. Refer to "Removing the body - side panels" on page 17.
3. The battery cables are color-coded. The black cable connects to the negative terminal on the battery. The red cable connects to the positive terminal on the battery.

ALWAYS disconnect the black (-) cable first. Slide clamp cover back, away from battery. Loosen screw and nut securing clamp to the (-) battery terminal.

Then remove the red (+) cable from the battery by sliding clamp cover back and loosening screw and nut securing the clamp to (+) battery terminal.

4. Remove the holder bar by loosening the wing nuts from the bolts. Make sure battery filler caps are closed to prevent liquid from splashing.
5. Remove battery and set it on a wooden rack or bench.

#### Cleaning the battery

1. Remove battery. (Refer to this page.)
2. To prevent any corrosive matter on cables from falling into tractor, gently pull cables to one side of tractor. Allow cables to hang over the side of tractor.

3. Clean cable clamps and battery terminals with a solution sold in automotive departments for said purpose. Inspect cables for damage.

#### Charging the battery



**WARNING: Batteries produce explosive hydrogen gas while being charged. Ventilate the area when charging the battery. Keep cigarettes, sparks, open flame, and other sources of ignition away at all times.**

If unfamiliar with charging the battery, refer to the charger manufacturer's instructions.

#### Replacing the battery

See your Dealer to make sure you have correct volts and amps before replacing your battery.

#### Installing the battery

1. Set battery on shelf. Position holder bar on battery.
2. Secure battery by fastening holder bar to shelf with bolts and wing nuts.
3. ALWAYS connect the red (+) cable first by securing clamp around positive battery terminal with screw and nut. Then connect black (-) cable by securing clamp around negative battery terminal with screw and nut.
4. Tighten both cables. Keep connections tight at all times to prevent arcing, pitting of connections, and eventual battery failure. Slide covers over clamps.
5. Replace side panels and close hood.



# Maintenance

## Electrical system (continued)

### Connections and wiring

The electrical connections and wiring should be checked at least every 25 hours of tractor operation. Make sure that connections are clean and tight and that wires are not rubbing on anything.

### Fuses

If an electrical failure occurs check the fuses. They are located in front of the console on the right side of the tractor.

To check a fuse pull it out of its socket. A fuse is not working if the metal inside is broken. Replace a broken fuse with one that has the same amperage.

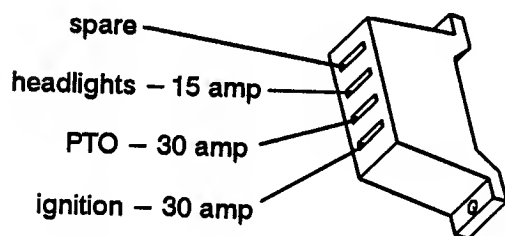


Figure 12. Fuses.

### Gauge light bulbs

To replace a light bulb in the console:

1. Open hood. Rotate the black bulb holder 1/4 turn counterclockwise. Pull unit out of opening.
2. Pull bulb out. Replace with bulb of the same type and wattage.
3. Insert unit in opening. Rotate 1/4 turn clockwise to fasten. Close hood.

### Headlights

If a headlight needs replacing:

1. Open hood. Remove side panels. Remove front grille, disconnecting headlight wires. Refer to "Removing the Body" on page 17 for further information.
2. Rotate the black bezel dial (Refer to Figure 13) 1/4 turn counterclockwise. Pull unit out of opening. Pull bulb out. Replace bulb with one of the same type and wattage. Insert unit in opening. Rotate dial 1/4 turn clockwise to fasten.
3. Reconnect wires. Replace front grille and side panels.

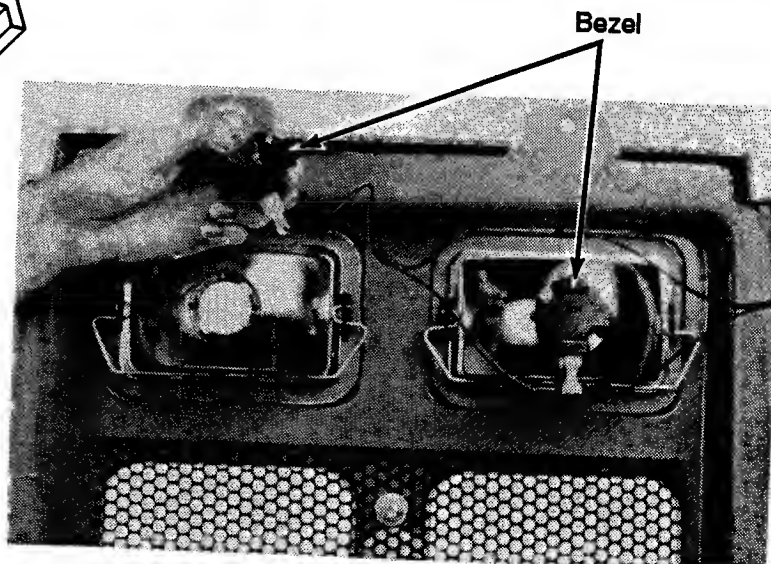


Figure 13. Headlights.

# Maintenance

## Electric clutch

The electric clutch needs no lubrication. If oil or grease inadvertently contaminates its working surfaces remove the contaminants by turning engine off and allowing it to cool. Then pour a generous quantity of a cleaning fluid, such as ammonia, between the working surfaces.

The clutch portion of this clutch/brake combination unit is self-adjusting.

The brake section may require adjustment depending on usage.

**! DANGER:** Never attempt to check or adjust the PTO or electric clutch while the engine is running. This will result in personal injury or damage to property. Push blade switch down to "OFF" position, stop tractor engine, and remove key before adjusting the PTO or electric clutch.

To adjust the brake:

1. Be sure engine is cool and not running. Turn off blade switch.
2. Raise hood. Remove side panels. Remove belt from electric clutch pulley (see attachment manual for instructions.)

**NOTE:** Refer to Figure 14 when attempting steps 3 thru 9.

3. Place a shim, .012" - .015" thick, in each of the three slots in the brake flange. Slots are located by the locknuts.

**! WARNING:** Prior to adjusting brake ensure engine is not running. Failure to do so could cause injury.

4. Turn ignition switch to run (engine must not be running), turn on the blade switch.

5. Loosen the locknuts holding the flange. Push the flange until it bottoms. Retighten locknuts using caution not to over torque them and damage the flange.

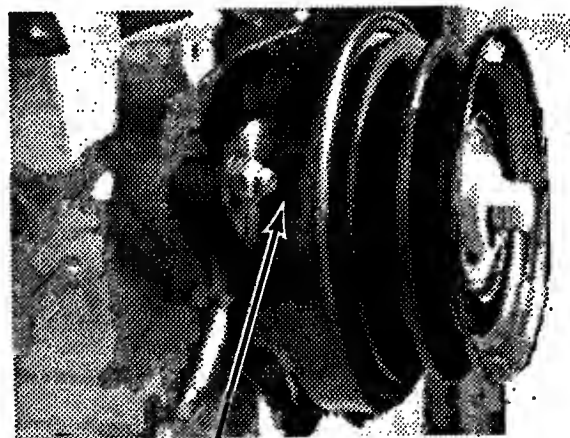
6. Turn off the blade switch. Remove the shims.

7. Check the gaps to be sure they are between .005" - .023". Readjust as required.

8. Reinstall the belt.

9. Start the engine and check the clutch operation. If the engine drags when the PTO is either OFF or ON, recheck the gap. The gap must be within the range of .005" - .023" on all three studs. Readjust if necessary.

10. Reinstall side panels.



slot (for shim)

**Figure 14. Electric clutch (side view).**

# Maintenance

## Engine

**NOTE:** If differences are encountered, the engine manufacturer's Owner's Manual should override this manual.

The three main causes of major engine failure are:

1. Insufficient cooling air.
2. No oil or dirty oil.
3. Dirty carburetor air.

The engine is air-cooled. Air is drawn into the area around the engine from the rear by flywheel fins.

To prevent the engine failure or overheating, the air filter, air intake screens, and engine cooling fins **must be kept clean and unobstructed at all times.**

### Air cleaner

The air cleaner is a porous paper air filter with a foam precleaner wrapped around it. It removes dust as air circulates through its surfaces. A clogged air cleaner reduces engine power and leaves unburned fuel in the engine.

The air cleaner should be checked after every use of the tractor. Clean it every 25 hours (sooner if operating in unusual conditions, such as heavy dust, etc.). Replace it every 100 hours.

### Checking, cleaning, replacing

To check, clean, replace the air cleaner, refer to Figure 15 and do the following steps:

1. Turn the engine off. Open hood.
2. Locate the square, plastic unit which houses the air cleaner. Unlatch it at the sides. Remove the top. Check bottom plate to be sure it is securely mounted and undamaged.

3. Remove wing nut from air cleaner cover. Remove cover. Remove cleaner.

4. **Precleaner** – Remove the foam precleaner that is wrapped around the paper air filter. Shake out debris. Wash the precleaner in detergent and water. Rinse, dry, and lightly oil. Squeeze out excess oil. **DO NOT WASH or OIL the PAPER FILTER.**

5. **Paper air filter** – **HANDLE CAREFULLY.** Replace filter if rubber gaskets or paper surfaces are damaged or very dirty.

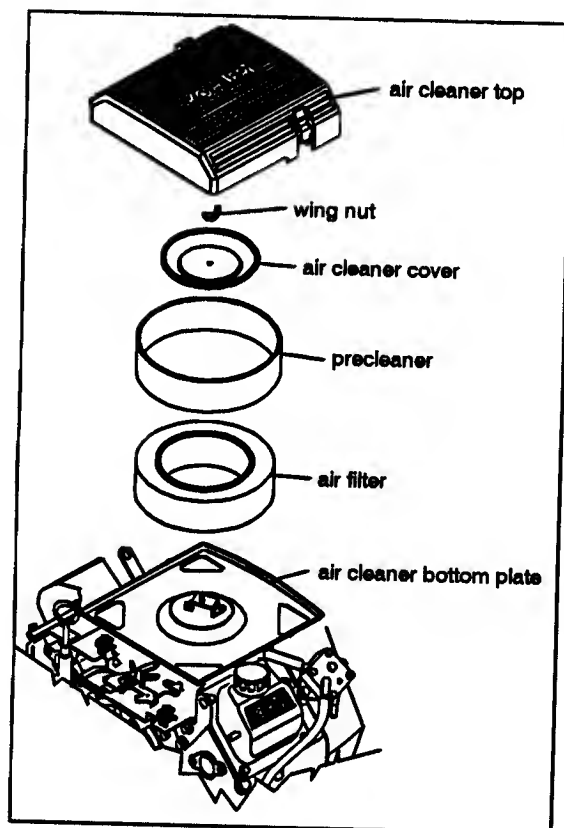


Figure 15. Air cleaner.

# Maintenance

## Engine (continued)

To ensure proper cooling, the external surfaces of the engine should be kept clean at all times.

**IMPORTANT NOTICE:** Operating the engine with a blocked grass screen, dirty or plugged cooling fins, and/or cooling shrouds removed will cause engine damage due to overheating.

### Air Intake/cooling system

Every 100 hours of operation (more often under extremely dusty or dirty conditions) cooling fins should be cleaned. Refer to the engine manufacturer's Owner's Manual or see your local Dealer.

### Air Intake screens

The air intake screens are located on either side of the tractor, near the middle. Check screens after every use. Dirty screens can cause engine to overheat. Check during use if operating in heavy dust or debris.

### Cleaning

To clean air intake screens:

1. Remove all debris, grass, etc. that has collected on the screens, blocking the holes.
2. Wipe the screens and rinse with a hose.

### Carburetor

Lack of power accompanied by black sooty exhaust smoke usually indicates that the fuel mixture is too rich. A clogged air cleaner can cause the same symptoms. Check the air cleaner first. The carburetor may not need adjustment. Refer to the engine manufacturer's Owner's Manual if adjustment is necessary.

### Oil and filter

The engine oil should be checked before every use of the tractor. The oil and filter should be changed after the first five hours of operation and every 100 hours thereafter. Dipstick and oil fill are on top of engine.

### Checking

To check oil level:

1. Pull dipstick (Refer to Figure 16) completely out of the crankcase. Wipe off oil. Reinsert dipstick completely.
2. Remove dipstick and read level.

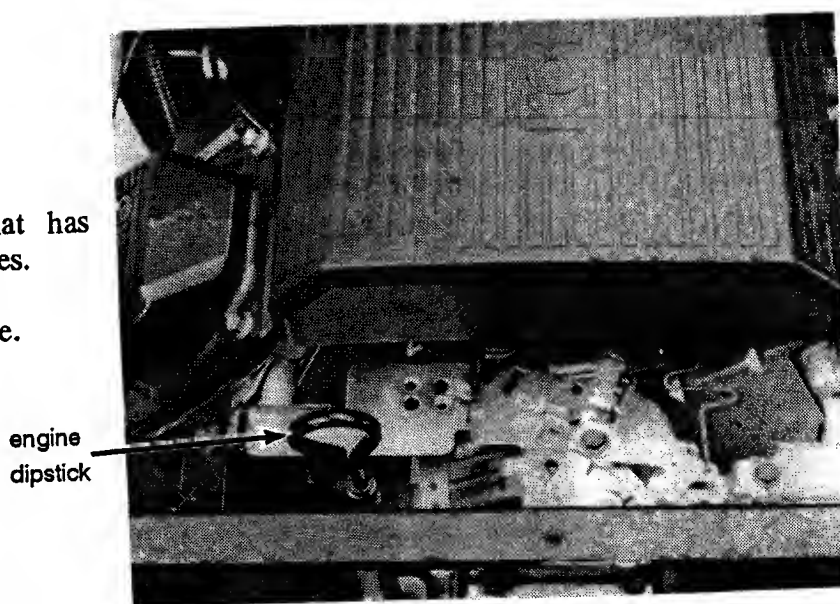


Figure 16. Engine dipstick.

# Maintenance

## Engine (continued)

### Changing oil and filter



**CAUTION:** Hot engine oil can cause burns.

Hot oil drains more freely and carries away more impurities than cool oil. Either run the engine for about five minutes to thoroughly warm the oil, or drain the oil while the engine is hot. Dispose of oil properly.

To change oil and filter:

1. Remove engine drain plug and filter on left-hand side of tractor. Drain oil into pan.
2. Replace plug and filter. Refill to full (F) mark on dipstick. **DO NOT OVERFILL.** Clean up spilled oil.
3. Start engine. Oil light should go out within 10 seconds. If it does not, turn off engine immediately and refer to "Troubleshooting" on page 14 in this manual.

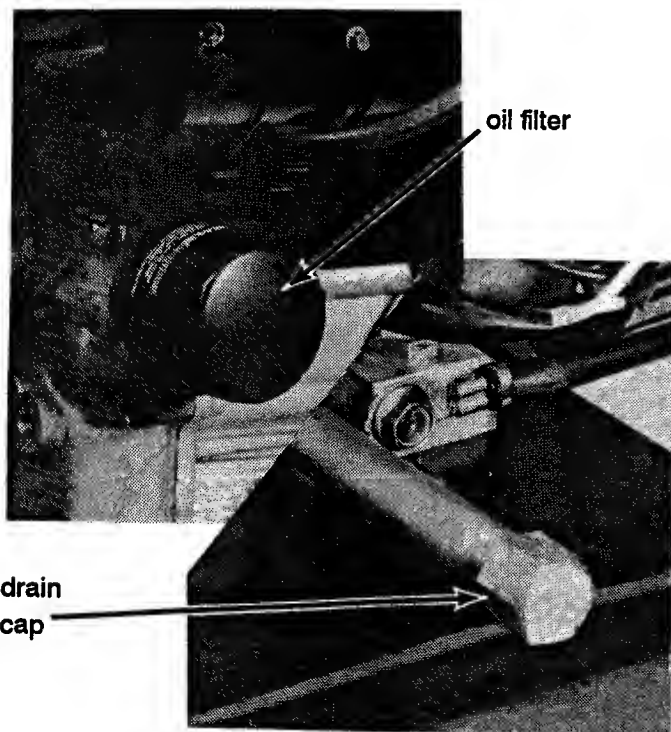


Figure 17. Engine oil filter and drain cap.

### Spark plugs

After every 100 hours of use, check the condition of each spark plug and reset the gap. The gap gradually widens as the electrodes wear under normal conditions. To check each plug:



**WARNING:** Before checking or servicing any part of the electrical system, first disconnect the black (-) battery cable. Then disconnect the red (+) cable. Failure to do so could cause severe burns.

1. Open the hood. Remove the side panels. First disconnect the black (-) battery cable. Then disconnect the red (+) battery cable.
2. Disconnect the lead wire from the top of the plug. Clean the area around the plug to prevent dirt from dropping into the engine.
3. Using care not to crack or break ceramic insulation material, remove the spark plug.
4. Check condition of electrodes. If the plug has a light coating of gray or tan, this usually indicates normal conditions.

**NOTE:** A white, blistered coating may indicate overheating. A black coating usually comes from operating with an overrich fuel mixture.

5. Replace both spark plugs even if only one is badly fouled or in poor condition.
6. If the old plug is in good condition, reset the gap to .040 inches.
7. Using a torque wrench, tighten each plug to 18 - 22 ft-lbs.
8. Reconnect lead wires from coil. First connect the red (+) battery cable. Then connect the black (-) battery cable. Replace side panels, and close hood.

## Fuel system

The tractor has a fuel screen at the fuel shutoff valve and an in-line fuel filter. They should be cleaned or changed after every 100 hours of use.

When adding fuel use fresh, unleaded gasoline with an octane rating of at least 87.



**WARNING: Handle fuel carefully.** Always stop the engine and turn off all electrical systems, including the headlights, when servicing the fuel system. Do not permit smoking in the area. Keep flames and sparks away from the area.

### Adding fuel

1. Check gauge in fuel tank cap behind seat for fuel remaining in tank.
2. Clean area around the fuel tank cap. Add fuel as required. Avoid spilling fuel.

**IMPORTANT NOTICE:** DO NOT ADD OIL TO THE GASOLINE. DO NOT USE GASOLINE/ALCOHOL BLENDS.

3. Wipe off any spilled fuel with rags. Allow spilled fuel and vapors to dissipate before turning on any part of the electrical system including the ignition. Place wipe-up rags in a well-ventilated area for drying.
4. Make sure the fuel cap breather hole is open (refer to page 6). If it is plugged, a vacuum is created and fuel cannot be drawn from the tank by the engine's fuel pump.
5. With fuel line shutoff valve open, (refer to page 10) check for leaks in the fuel tank, fuel lines and connections, fuel pump, and carburetor. Correct all leaks before starting engine.
6. When the tractor is left unattended, the rear fuel shutoff valve should be closed (turn clockwise).

### Fuel screen and filter

To clean/replace the screen in the tank:

1. Close the fuel line shutoff valve at the rear of tractor (under fuel tank).
2. Disconnect fuel line at the fuel shutoff valve. Collect fuel from line in a suitable container.
3. Reopen the shutoff valve. Drain the fuel from the tank into a suitable container.
4. Pull entire shutoff valve out of tank with a twisting motion.
5. Clean the screen or replace shutoff valve. Reinstall shutoff valve. Reconnect fuel line. Fill fuel tank. Open fuel shutoff. Check for leaks.

To replace the filter in the fuel line:

1. Close fuel line shutoff valve.
2. Slide the hose clamps off. Remove the filter. Refer to Figure 18. Collect fuel in a suitable container.
3. Add new filter with arrow pointing toward carburetor. Reinstall hose and clamps.
4. Open fuel shutoff. Check for leaks.

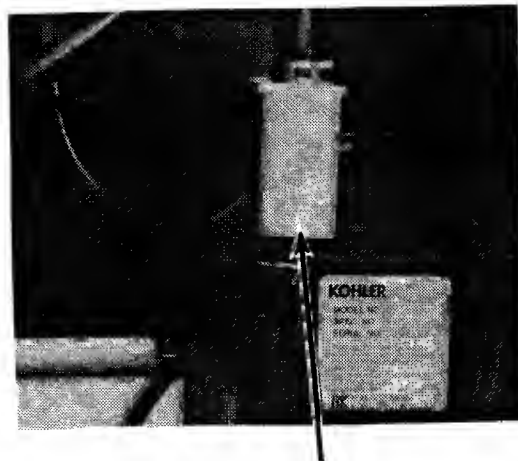


Figure 18. In-line fuel filter.

# Maintenance

## Hydraulic system

The hydraulic system consists of the hydrostatic transmission, power steering, cylinders, valves, hoses, fittings, and filter. See your Dealer to repair or replace transmission, transaxle, cylinders, and valves.



**WARNING:** Keep body and hands away from pin hole leaks that eject hydraulic fluid under high pressure. When searching for leaks use paper or cardboard, not hands.



**WARNING:** Make sure all hydraulic fluid connections are tight. Make sure all hydraulic hoses and lines are in good condition before applying pressure to the hydraulic system.



**WARNING:** Hoses under pressure! Escaping fluids can penetrate skin and require immediate surgical treatment.



**CAUTION:** Make certain implements are fully lowered to the ground before servicing any hydraulic component.



**CAUTION:** Do not loosen hose fittings while the engine is running. Do not overtighten fittings. Damage will result from too much force. Tighten only enough to prevent leakage. Teflon thread sealant can be used on pipe threads if necessary.

Hydraulic hoses, fittings, and filter may be replaced by the user. After replacing components check fluid level of hydraulic tank, refill if necessary. Run the tractor and check for leaks. Wipe any spilled oil off the tractor.

## Hoses and fittings

The hoses and fittings should be checked at least every 25 hours of tractor operation. The hoses should not be loose or cracked and the fittings should be tight. If they are not in good condition obtain replacements from your Dealer.



# Maintenance

## Hydraulic system (continued)

### Oil

The oil in the hydraulic tank, located under the front left corner of the seat, should be at 3" below the top. **DO NOT OVERFILL.** Check the oil level regularly. To check oil, unscrew the cap and look in tank. Fill with Dexron II hydraulic oil.

### Hydraulic oil coolers

The hydraulic oil is cooled in oil coolers. (Refer to Figure 19). These coolers must be kept clean and unobstructed to prevent overheating of the hydraulic system and transmission.

To clean oil coolers:

1. Allow engine to cool. Remove side panels and screens.

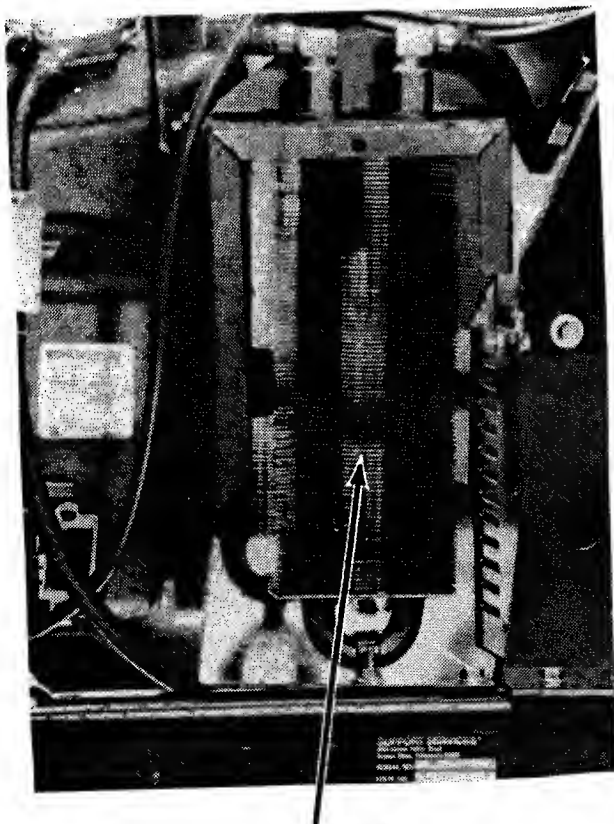


Figure 19. Hydraulic oil coolers.

2. Visually inspect the cooler fins located between the console and engine. Remove any debris caught between the fins. **BE VERY CAREFUL** not to bend or damage the fins.

3. Separate any fins which are touching each other. Use a brush and/or water under moderate pressure to clear out the oil cooler compartment.

4. Replace screens and side panels.

### Transmission oil filter

The transmission oil filter (Refer to Figure 20) should be replaced every 100 hours. Gain access to the filter from beneath the tractor. Unscrew the filter and replace with a new filter.

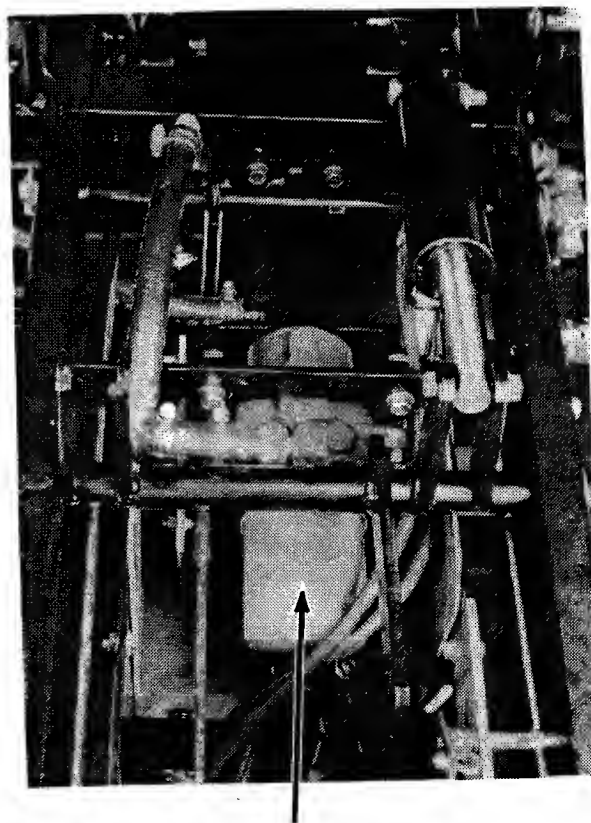


Figure 20. Transmission oil filter.

# Maintenance

## Lubrication

To maintain optimum performance, certain areas of the tractor should be cleaned and lubricated at various intervals. Follow the recommended steps to prevent premature or excessive wear of the parts.

### Differential

The differential (Refer to Figure 21) should be checked and lubricated every 100 hours of tractor use. It is located at the rear of the tractor, under the fuel tank. To lubricate the differential:

1. Clean the exposed area of the rubber plug (Refer to Figure 21) and clean the area around the plug.
2. Pull the rubber plug. Fill the differential to the bottom of the hole with 80/90 gear lube. Replace plug.

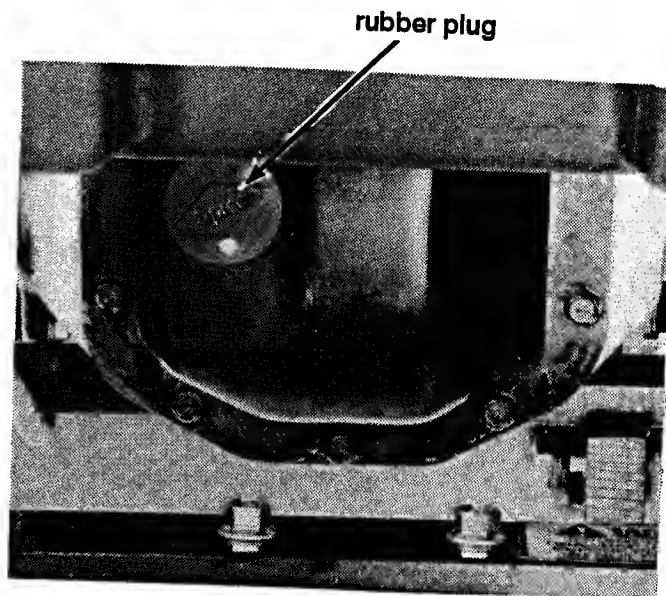


Figure 21. Differential.

### Final drive

The final drive (Refer to Figure 22) should be checked and lubricated every 100 hours of tractor use. The final drive consists of two gear assemblies. They are to the inside of the rear wheels, connected by the differential. To lubricate the final drive do the following to each gear assembly:

1. Clean the exposed areas of the fill plug and the check plug. Clean the areas around the plugs.
2. Remove the fill and check plugs. Add 80/90 gear lube in fill hole until lube runs out the check hole. Replace plugs, making sure that the vented plug is inserted in the fill hole.

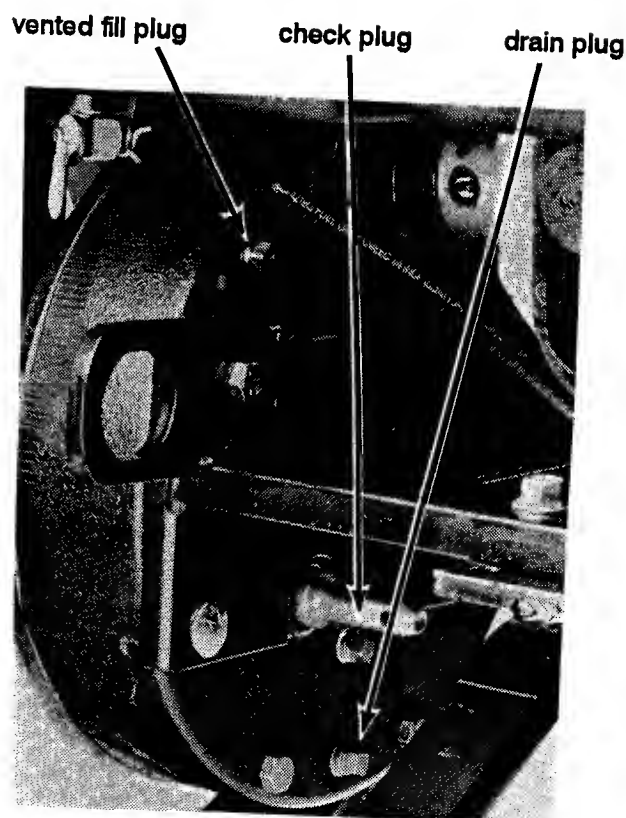


Figure 22. Final drive.

# Maintenance

## Lubrication (continued)

### Steering spindle grease fittings

The front steering spindle grease fittings, one on each spindle, should be greased every 25 hours of tractor use. To grease the fittings refer to Figure and do the following steps:

1. Jack up the tractor and support it with blocks.
2. Using lithium based grease, grease the fittings (Item 5) until the grease oozes out. Then turn the steering wheel a few times to distribute the grease.

### Support bar grease fitting

The front support bar grease fitting should be greased every 25 hours of tractor use. To grease the fitting refer to Figure and do the following steps:

1. Jack up the tractor and support it with blocks or jack stands.
2. Using lithium based grease, grease the fitting (Item 4) until the grease oozes out. Then turn the steering wheel a few times to distribute the grease.

### Wheel bearings

The front wheel bearings should be packed every 100 hours of tractor use. There are two bearings in each front wheel hub. To pack the bearings refer to Figure and do the following to each front wheel:

1. Jack up the tractor and support it with blocks or jack stands.
2. Remove the tire and wheel assembly by removing the five nuts (Item 14) from the studs (Item 13).

3. Remove the dust cap (Item 12), cotter pin (Item 17), nut (Item 15), and washer (Item 16). Pull the hub assembly off the spindle.

4. Remove the outer bearing (Item 10). Place the hub upside down on a workbench. Remove the inner bearing and seal (Items 10, 11).

5. Clean the bearings and hub with a non-flammable solvent. Inspect the bearings and hub for cracks, stress or pitting. Replace the bearing and race if either is damaged.

6. Pack the inner and outer bearings with an approved wheel bearing grease. Place a small amount of grease inside the hub, in the dust cap, and on the spindle.

7. Place the inner bearing in the hub. Install the seal so it is flush with the hub flange. Place the hub on the spindle. Install the outer bearing, washer, and nut. Mount the tire and wheel assembly.

8. While spinning the wheel, snug the nut down to seat the bearing, being careful not to exert over 12 ft.-lbs. of force. Back the nut off 1/4 to no more than 1/2 turn. Finger-tighten the nut until the cotter pin hole in the spindle lines up with the hole in the nut.

9. Install the cotter pin. Endplay should measure between .001" - .008". If not, readjust by repeating step 8.

10. Lock the cotter pin in place. Install the dust cap over the nut.

## Lubrication (continued)

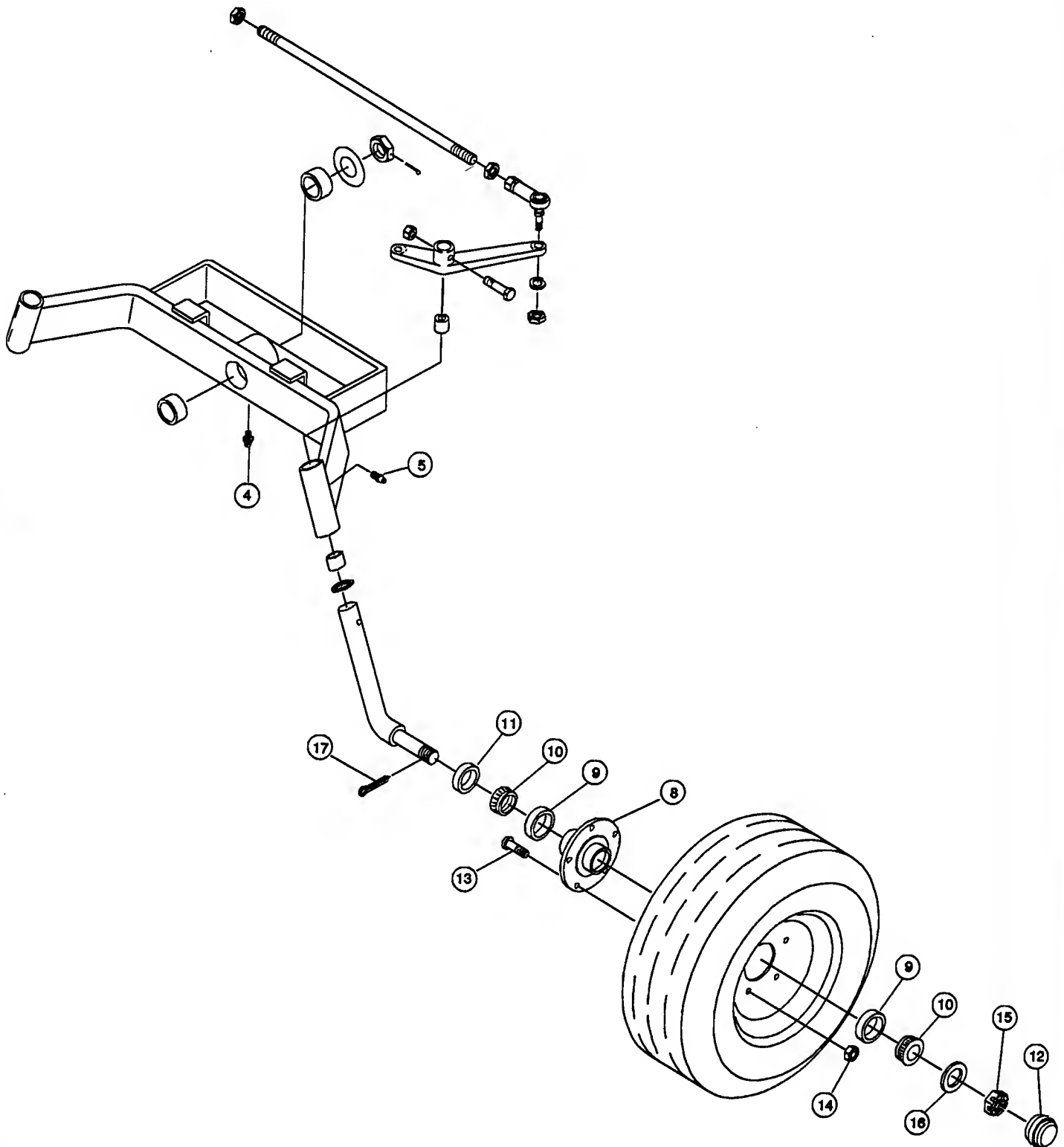


Figure 23. Front end grease fittings and wheel bearings.

# Maintenance

## Tires and wheels

### Tire maintenance

Proper tire maintenance is one of the most important factors in the satisfactory performance of your tractor. Observe the following tire care rules for best results:

1. Immediately wipe spilled oil and gasoline from tires. Do not park in spilled oil. Petroleum products attack rubber. Clean chemicals from tires as soon as possible.
2. Avoid sharp objects which may cut or puncture tires.
3. Avoid "bruising" tires by striking hard objects with heavily loaded tractor or at high speeds.
4. Do not "spin" tires during start-up.
5. Do not brake to skidding stops.

### Tire pressure

Maintain proper inflation:

Underinflation may cause rim slipping, excessive wear, and a low or uneven cut when mowing.

An underinflated tire may appear to be properly inflated but will buckle when the tractor pulls a load. Sidewalls will eventually break.

Overinflation may cause the rear wheels to slip under load and cause faster tire wear as a smaller part of the tire is in contact with the ground.

A correctly inflated tire results in good traction with the least wear. The recommended pressure may vary depending upon the load. Refer to Tractor Specification on page 60 for tire combination air pressure requirements and load capacity

### Tread width

Tread width refers to the spread or spacing between the center lines of the two rear wheels or the two front wheels of the tractor.

When moving on slopes or rough uneven ground, it is important to have as wide a spread as possible between the wheels. This makes the tractor more stable and reduces the possibility of a "rollover."

**REAR WHEELS** - to increase the tread width from the standard position mount the right rear wheel on the left side and the left rear wheel on the right side. Switching wheels from one side to the other will maintain the proper direction of tire rotation. (Note: Does not apply to 13.5-15 wheels.)

### Changing wheels

To remove a wheel and tire:

1. Remove any wheel weights. Block the other wheels to prevent the tractor from rolling.
2. Raise the tractor with a jack under the frame. Support the tractor with blocks or jack stand to prevent it from falling.
3. Remove wheel bolts and carefully slide the wheel and tire from the tractor.

## Tires and wheels (continued)

### Wheel weights

Added weight to the front and/or rear wheels can make tractor operation easier and safer under certain conditions.

**REAR WHEELS** – added weight on the rear wheels will be helpful:

- When pulling – the weights will give added traction and reduce slippage.
- In maintaining traction with a heavy load at the front of the tractor (such as with a snowblower or bulldozer blade).

**FRONT WHEELS** – front counterweights mounted on the front wheels or on the front weight rack will be helpful:

- In balancing the lifting action caused by rear-mounted attachments.
- To prevent loss of steering when driving up a slope.
- When pulling heavy loads on rough ground.

Wheel weights should be used in pairs to give an equal amount of added weight on each side of the tractor.

Operating with weight on only one side will cause uneven tire wear. This can cause improper operation of some attachments such as a rotary mower.

**NOTE:** Do not exceed three weights per wheel, six suitcase counterweights or any combination of loads that will exceed the rated tire capacity.

**REAR WEIGHT RACK OR WEIGHT BOX OPTION** – a weight rack or weight box may be mounted on the 3-point hitch.

**DUAL REAR WHEELS** – spacer kits are available that allow the addition of an extra wheel to the outside of each rear wheel. Dual rear wheels will increase stability and add traction. (Does not apply to 13.5 - 15 wheels.)

## Transmission

The transmission oil coolers must be kept clean at all times to prevent the transmission from overheating. The oil filter should be changed every 100 hours.

Refer to “Hydraulic system” on page 27 for details on cleaning the coolers and replacing the filter.

## Tractor Storage

When the tractor is not to be used for an extended period of time, it should be prepared for storage. This helps to extend its life, keep it in prime condition, and make it ready for future use.

The tractor should be stored in a dry and protected place. Unnecessary exposure to sun, wind, rain, or snow may have harmful effects on its appearance and usefulness.

The tractor should be started up and driven at least every six months to maintain critical lubrication coverage on moving parts.

### Engine

To prepare the engine for storage:

1. Change the oil. Run the engine long enough to thoroughly warm the old oil in the crankcase before draining. (Refer to "Engine on page 23).
2. Run the engine for about five minutes after adding new oil supply.
3. Close the fuel shutoff (Refer to Figure 24) valve and run engine until fuel in carburetor is used up.



**WARNING:** Handle fuel carefully. Always stop the engine and turn off all electrical systems, including the headlights, when servicing the fuel system. Do not permit smoking in the area. Keep flames and sparks away from the area.

4. Using a pair of notched pliers on the hose clamp, disconnect the fuel line from the fuel shutoff valve. (Refer to Figure 24) Drain fuel line in a suitable container.

5. Reopen the fuel shutoff valve and drain fuel tank in a suitable container. When empty, remove fuel filter from valve and wash out as required. Reinstall valve and replace in tank.

### IMPORTANT NOTICE

: It is important to perform these fuel line functions because gum will eventually form in the tank, line, and carburetor if the system is not used.

Gum in the carburetor jets and passages makes engine starting difficult. Gum can be dissolved with acetone or a 50-50 mixture of alcohol and benzol.

6. Remove each spark plug and pour one tablespoon of good quality lubricating oil into each cylinder. Crank the engine two or three times to distribute the oil over the cylinder walls.
7. Recheck the gap and reinstall each plug.

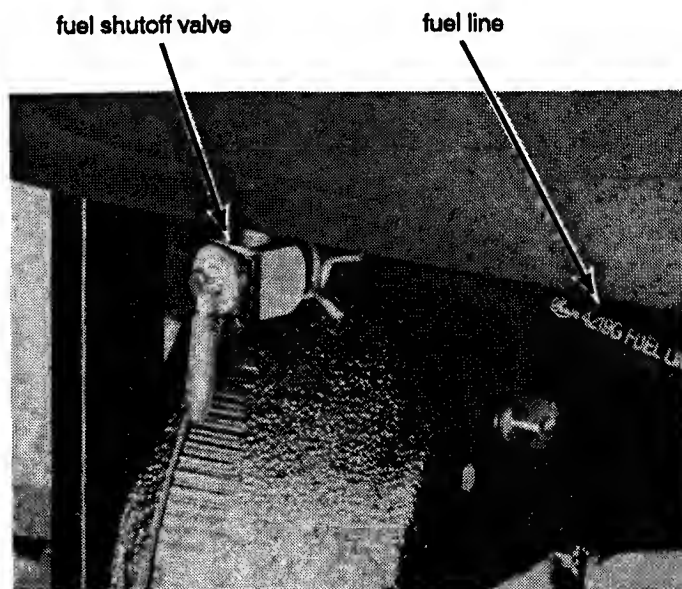



Figure 24. Fuel shutoff valve and fuel line.



# Tractor Storage

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## Battery

 **WARNING:** Before checking or servicing any part of the electrical system, first disconnect the black (-) battery cable. Then disconnect the red (+) cable. Failure to do so could cause severe burns.

1. To remove and store the battery refer to "Removing the battery" on page 20. First disconnect the black (-) battery cable. Then disconnect the red (+) cable.

Refer to "Cleaning the battery" on page 20 and clean any corrosion that may have accumulated around the posts. Store the battery on a wooden rack or bench in a cool, dry place.

2. The battery should be checked every 30 to 60 days while in storage and should be recharged if necessary. When a battery becomes discharged, the electrolyte contains more water than acid. In this discharged condition, the battery could freeze and possibly crack during cold winter weather.

3. When reinstalling the battery, refer to "Installing the battery" on page 20. First connect the red (+) cable. Then connect the black (-) cable.

Keep connections tight at all times to prevent arcing, pitting of connections, and eventual battery failure.

## Lubrication

Completely lubricate the tractor. Refer to "Lubrication" on page 29.

## Body

1. Wash, clean, and wax the hood and body sections.
2. Paint rust-preventative oil over any area where raw metal is exposed (except pulley grooves). Do not use crankcase oil as it is not a rust preventative.

## Tires

1. Store the tractor so that the tires are protected from direct sunlight.
2. Place jack stands or blocks under the tractor so that the load is off the tires.

If the tractor cannot be placed on blocks, check the tires at regular intervals and reinflate as necessary to keep them at recommended pressure.

## Attachments

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The tractor is equipped with front hitch blocks, a lift weldment, and a towbar for attaching implements.

In addition to these standard features, optional features can be added to enhance the tractor's capabilities. These optional features include the addition of a rear PTO, and auxiliary hydraulic lift, and a 3-point hitch. See your Dealer for a list of standard and optional attachments.

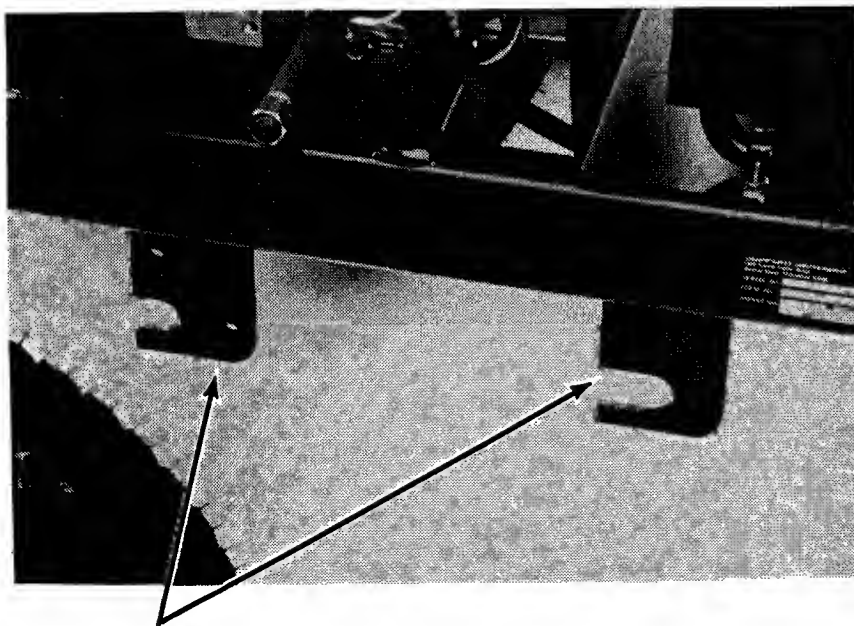
### Middle lift weldment

A lift weldment is mounted on the underside of the tractor between the frame side members. This weldment rotates forward or backward as the implement lift system is activated. The arm(s) that is used depends on the attachment.

## Standard features

### Front hitch blocks

Two sets of metal bars are permanently affixed to the bottom front of the tractor frame. Round horizontal slots are on the leading edge of each bar. Holes for mounting pins are located above and behind the slots on the frontmost blocks. All front-mounted attachments have mounting rods or studs that fit into the slots. They are secured with blank bolt pins and quick change keys on the front blocks. (Refer to Figure 25)



**Figure 25. Front hitch blocks.**

## Attachments

### Standard features (continued)

#### Rear towbar

The rear-mounted towbar is used when pulling trailers, spreaders, yard carts, or any other implement (unless the 3-point hitch is installed). (Refer to Figure 26)



**CAUTION:** Never pull from any other part of the tractor frame.

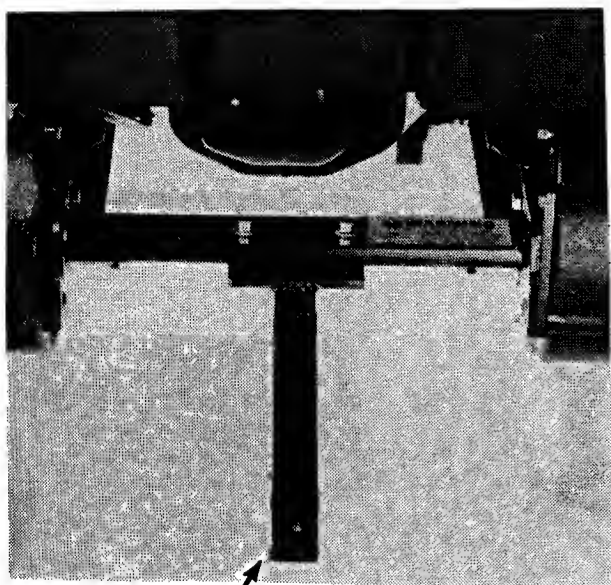


Figure 26. Towbar.

### Optional features

#### 3-Point hitch

The 3-point hitch is for pulling category "O" implements and attachments. When installed, it should be used for all pulling.

#### Auxiliary hydraulic lift

The auxiliary hydraulic lift allows rear-mounted implements to be raised/lowered independently of the front and center-mounted implements.

#### Rear PTO

The rear PTO is used to power rear-mounted rotary attachments, such as flail and sickle mowers and rototillers.

# Parts Lists and Drawings

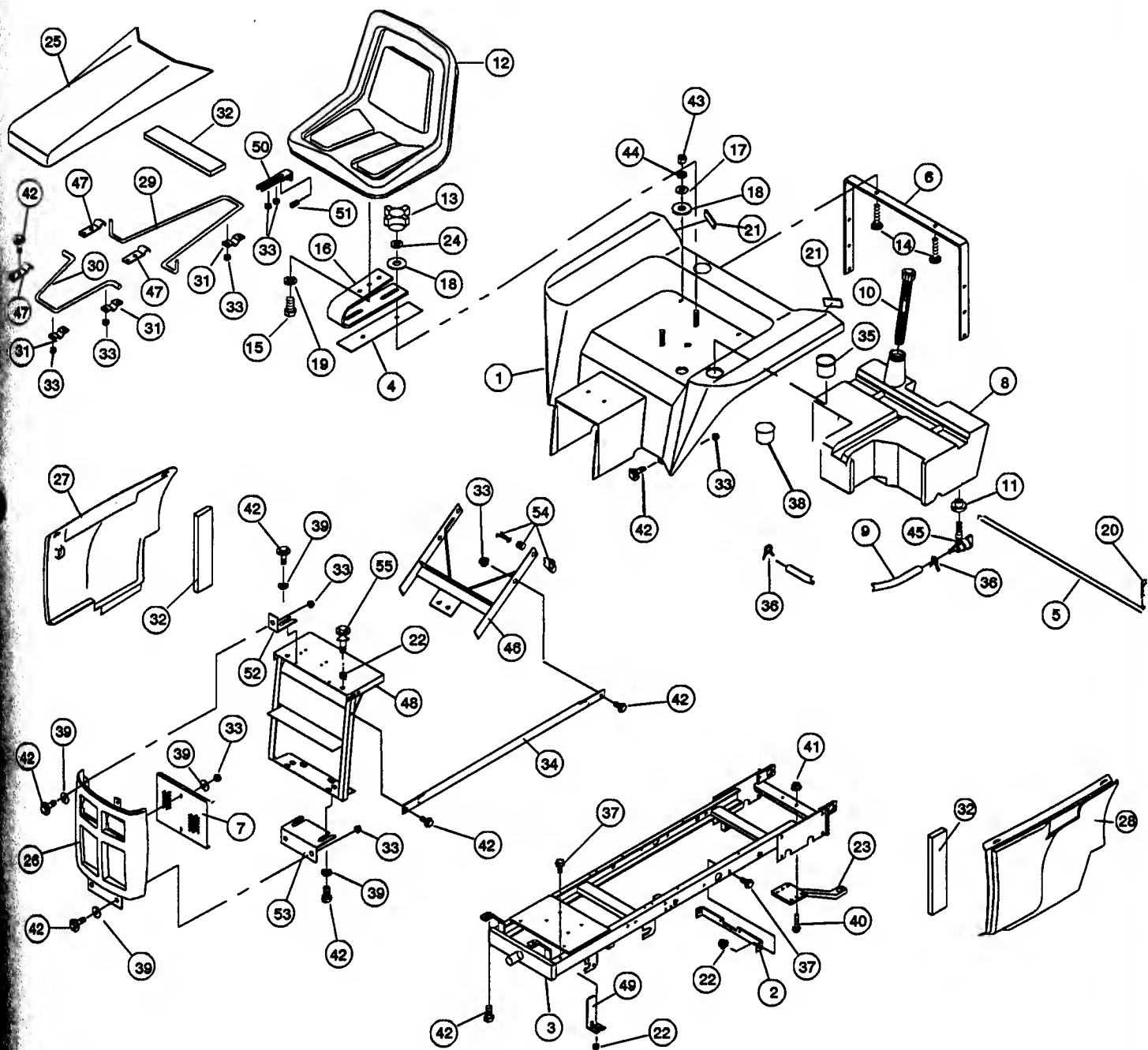
## Body

ITEM NO.	PART NO.	QTY	PART NAME	DESCRIPTION
1	104015	1	Body .....	Fender orange
(1)	104126	1	Body .....	Fender (red)
2	01-0530-00	1	Bracket .....	Support transmission
3	103751	1	Frame .....	Weldment
4	01-6101-00	1	Plate .....	Seat spring support
5	01-6540-00	1	Rod .....	Fuel tank support
6	01-6890-00	1	Support .....	Fender body
7	103991	1	Screen .....	Grille
8	01-7501-00	1	Tank .....	Fuel 8.25 gallon
9	104275	1	Line .....	Fuel
10	03-0900-00	1	Cap .....	Fuel Gauge
11	03-2502-00	1	Grommet....	Valve, fuel tank
12	03-7107-00	1	Seat .....	14" Back
13	100921	2	Knob .....	Seat
14	84-1027-00	2	Bolt .....	Carr 3/8 NC x 1 1/2
15	84-1062-00	1	Screw .....	HHC 1/2 NC x 1
16	01-7112-00	1	Bracket .....	Spring seat mount
17	84-3037-00	2	Washer .....	Flat, 3/8 type N
18	84-3061-00	4	Washer .....	Flat, 1/2 type W
19	84-3110-00	1	Washer .....	Lock 1/2 regular
20	84-4034-00	2	Key .....	Quick change
21	03-6702-00	2	Reflector ....	Rear
22	103124	6	Nut .....	Flange 3/8 NC serrated
23	01-1304-00	1	Drawbar ....	Stationary
24	84-3770-00	2	Washer .....	Lock Int 1/4
25	103987	1	Hood .....	Top orange
(25)	104122	1	Hood .....	Top (red)
26	103990	1	Grille .....	Front orange
(26)	104121	1	Grille .....	Front (red)
27	103988	1	Hood .....	Panel RH orange
(27)	104123	1	Hood .....	Panel RH (red)

ITEM NO.	PART NO.	QTY	PART NAME	DESCRIPTION
28	103989	1	Hood .....	Panel LH orange
(28)	104124	1	Hood .....	Panel LH (red)
29	103967	1	Rod .....	Hood prop rear
30	104281	1	Rod .....	Hood prop front
31	103978	3	Clip .....	Hinge
32	104174	1	Foam .....	2" x .5" x 4.5"
33	200183	18	Nut .....	Flange 1/4 NC serrated
34	104277	2	Rod .....	Support
35	104134	1	Cupholder ..	Drop-in
36	85-0044-00	2	Clamp .....	Hose, SAE J536b
37	103140	4	Screw .....	HWH 3/8 NC x 1
38	104493	1	Sleeve .....	Rubber
39	10287	10	Washer .....	Flat 1/4 type W
40	104187	2	Screw .....	HWH 7/16 NC x 2
41	102998	2	Nut .....	Flange 7/16 NC serrated
42	104188	22	Screw .....	HWH 1/4 NC x 3/4
43	84-0041-00	2	Nut .....	HX 3/8 NC
44	84-3020-00	2	Washer .....	Lock 3/8 regular
45	104197	1	Valve .....	Fuel 90° tank mount
46	104278	1	Bracket .....	Rear
47	104280	3	Clip .....	Mounting
48	104282	1	Bracket .....	Front
49	104377	2	Bracket .....	Retaining panel
50	104409	1	Bracket .....	Hood latch
51	104365	1	Plunger .....	Ball 3/8 dia.
52	104410	2	Clip .....	Mounting grille top
53	104411	1	Clip .....	Mounting grille bottom
54	104221	4	Fastener ....	Camloc 1/4 turn
55	104447	2	Screw .....	Nylon thumb 3/8 x 1.00
56	104493	1	Sleeve .....	Rubber

# Parts Lists and Drawings

## Body



# Parts Lists and Drawings

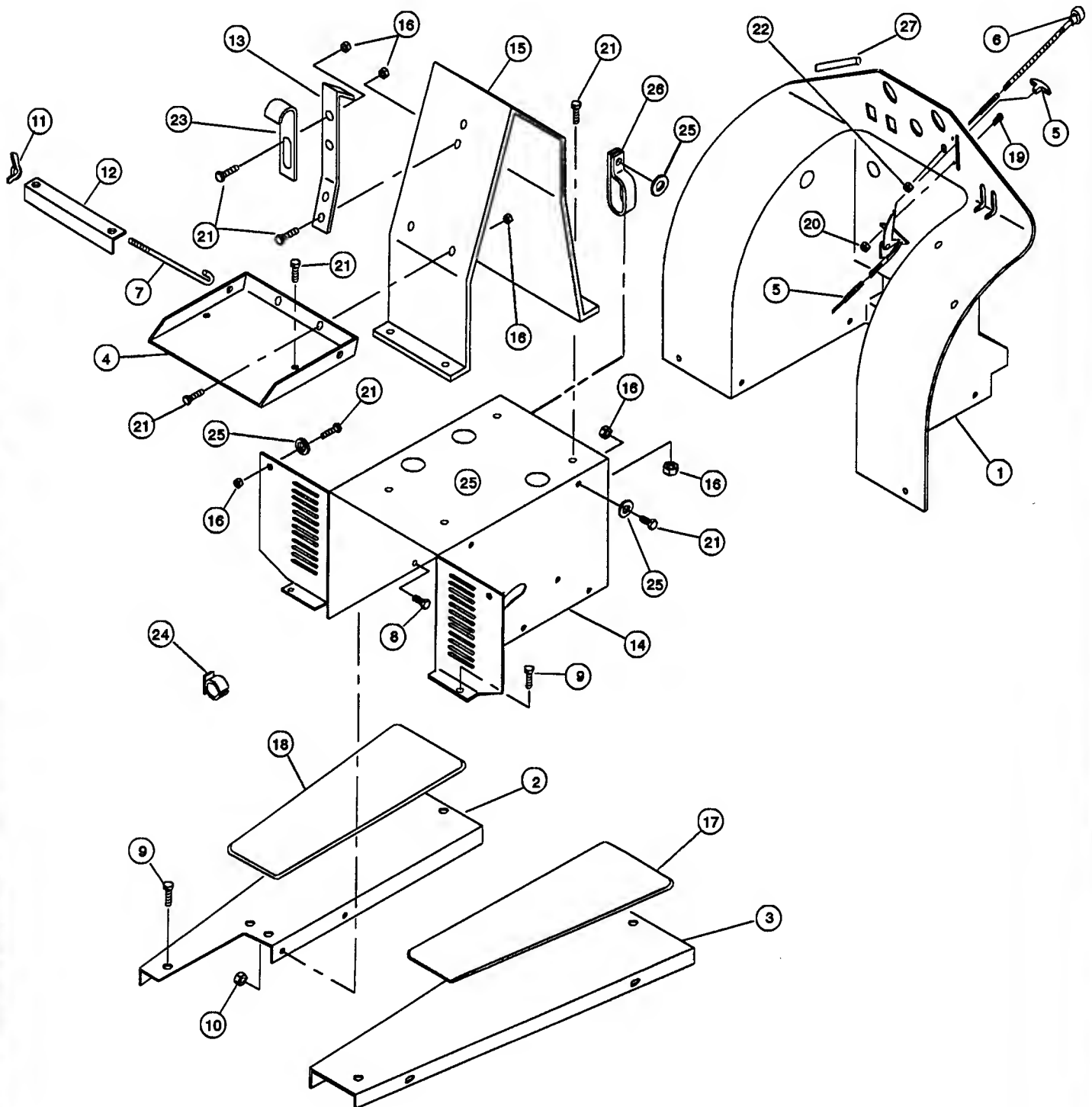
## Console

ITEM NO.	PART NO.	QTY	PART NAME	DESCRIPTION
1	104003	1	Console ....	Fiber reinforced plastic
2	01-6308-00	1	Plate .....	Footrest RH
3	01-6309-00	1	Plate .....	Footrest LH
4	103977	1	Shelf .....	Battery
5	103993	1	Control .....	Throttle
8	103992	1	Control .....	Choke
7	84-1014-00	2	Bolt .....	"L" 1/4 NC x 8-5/16
8	10435	4	Screw .....	HWH 5/16 NC x 5/8
9	84-2044-00	6	Screw .....	HWH 5/16 NC x 3/4 tap
10	102996	4	Nut .....	Flange 5/16 NC serrated
11	104004	2	Nut .....	Wing 1/4-20 NC
12	103966	1	Bar .....	Battery holder
13	103981	1	Bar .....	Console support
14	104016	1	Support .....	Bottom console

ITEM NO.	PART NO.	QTY	PART NAME	DESCRIPTION
15	104000	1	Support .....	Steering gear
16	200183	16	Nut .....	Flange 1/4 NC serrated
17	01-6303-00	1	Pad .....	Foot-LH anti-slip
18	01-6304-00	1	Pad .....	Foot-RH anti-slip
19	104097	2	Screw .....	THM #8-32 x 5/8
20	104098	2	Nut .....	Lock #8-32 nylon insert
21	104188	18	Screw .....	HWH 1/4 NC x 3/4
22	104189	1	Nut .....	Jam HX 3/8 NF
23	104002	1	Latch .....	Hood
24	02-4717-00	1	Clip .....	Hold down
25	10287	7	Washer .....	Flat 1/4 type W
28	102190	1	Clamp .....	1/2 Double tube
27	104566	1	Molding .....	Trim-Lok plastic

# Parts Lists and Drawings

## Console



# Parts Lists and Drawings

## Front end assembly and front wheels

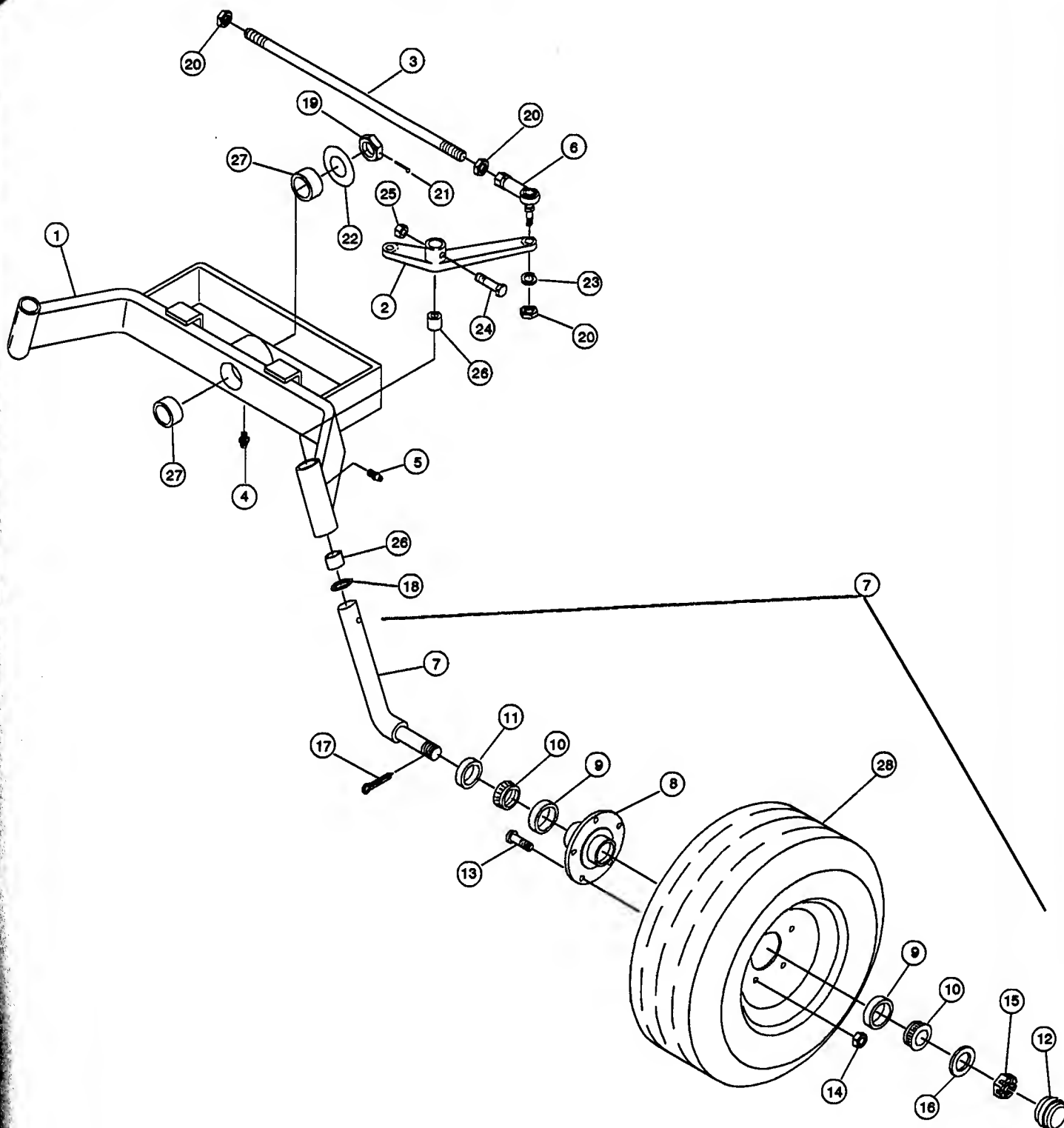
ITEM NO.	PART NO.	QTY	PART NAME	DESCRIPTION
1	01-0212-00	1	Bar .....	Front axle support
2	01-0220-00	1	Spindle .....	Steering arm, RH
(2)	01-0221-00	1	Spindle .....	Steering arm, LH
3	01-0910-00	1	Rod .....	Tie, coupling 28" lg.
4	03-2122-00	1	Fitting .....	Grease 1/4-28 90°
5	03-2102-00	2	Fitting .....	Grease 1/4-28 short
8	03-4107-00	2	Knuckle .....	Rod end 1/2" NF threads
7	103709	2	Spindle .....	Front ASM (includes items 8-17)
8	103824	2	Hub .....	Assembly (includes items 9 & 13)
9	103828	4	Cup .....	Bearing, 1.00 bore
10	103829	4	Cone .....	Bearing 1.00 cup
11	103827	2	Seal .....	1 1/4 ID x 1 1/4 wide
12	103830	2	Cap .....	Hub, 2" dia.
13	103825	10	Stud .....	Wheel, 1/2-20 x 1-7/8
14	103826	10	Nut .....	Wheel, 1/2-20

ITEM NO.	PART NO.	QTY	PART NAME	DESCRIPTION
15	84-0073-00	2	Nut .....	HX 3/4 NF slotted RH
16	84-3070-00	2	Washer .....	Flat 3/4 type N
17	101867	2	Pin .....	Cotter 5/32 dia. x 1 3/4
18	80-0024-00	2	Bearing .....	Thrust
19	84-0080-00	1	Nut .....	HX 1-1/8 NF slotted
20	84-0131-00	4	Nut .....	HX 1/2 NF
21	84-4020-00	1	Key .....	Cotter 5/32 x 1 1/2
22	84-3077-00	1	Washer .....	Flat 1-1/8 type N
23	84-3110-00	2	Washer .....	Lock 1/2 regular
24	102522	2	Screw .....	HHC 7/16 NC x 2 1/4
25	102127	2	Nut .....	Lock (center) 7/16 NC
26	80-0013-00	4	Bushing .....	1-1/8 ID x 1-3/8 OD x 1
27	80-0019-00	2	Bushing .....	Sleeve, 1 1/2 ID x 1 lg.
28	103875	2	Tire & Wheel	Three rib front AG.



## Parts Lists and Drawings

### Front end assembly and front wheels



# Parts Lists and Drawings

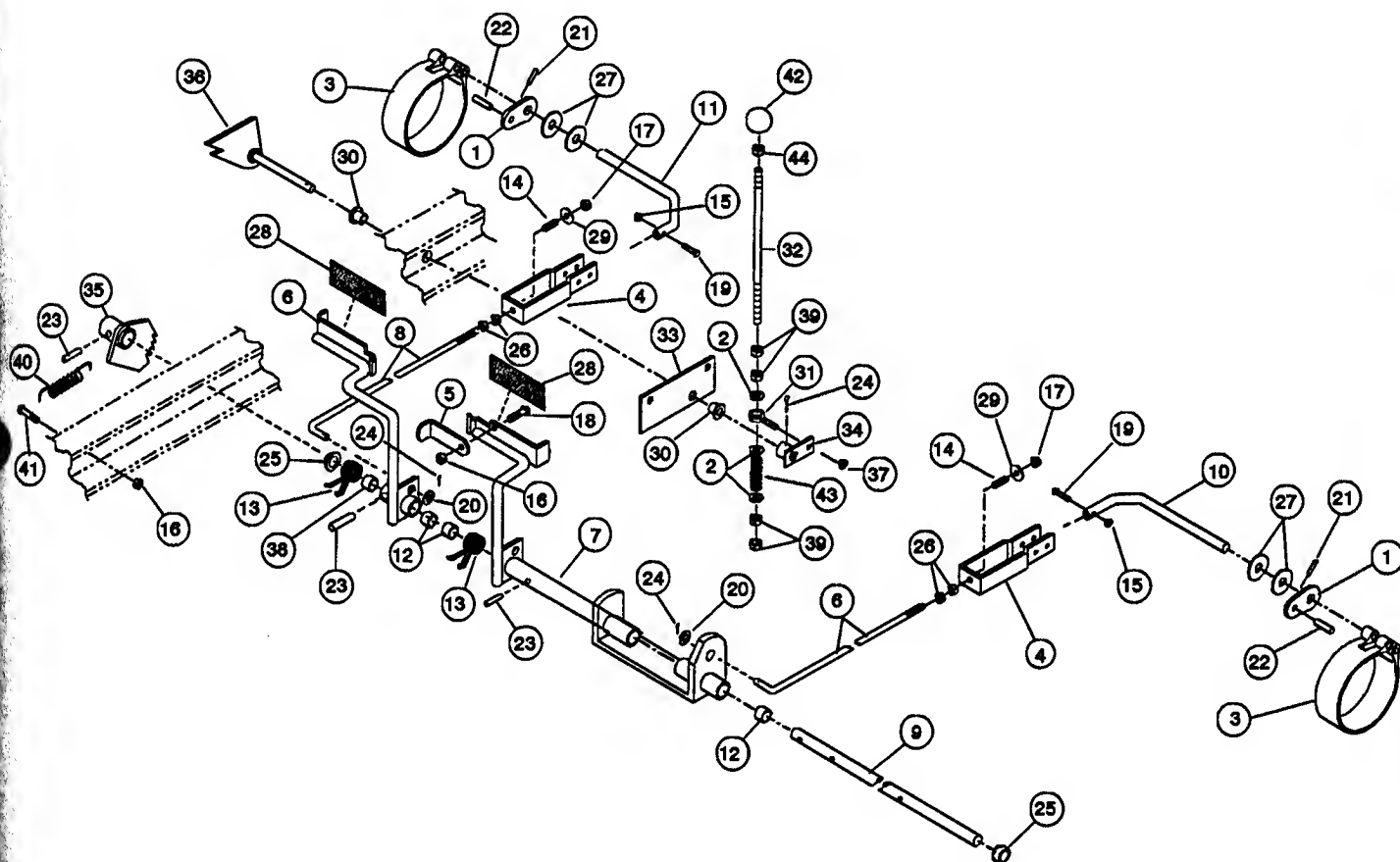
## Brake system

ITEM NO.	PART NO.	QTY	PART NAME	DESCRIPTION
1	01-0104-00	2	Arm	Brake, 2.3 lg.
2	84-3090-00	3	Washer	Flat 1/4 type N
3	01-0513-00	2	Band	Brake, 4" Dia., 2 loop
4	01-2510-00	2	Clevis	Brake, 5-5/8 lg.
5	01-4701-00	1	Latch	Brake pedal
6	104242	1	Pedal	Brake, right side
7	104238	1	Pedal	Brake, left side
8	01-6510-00	2	Rod	Brake, 28.5" lg.
9	104240	1	Shaft	Brake
10	01-8716-00	1	Shaft	Brake actuating, left side
11	01-8717-00	1	Shaft	Brake actuating, right side
12	80-0017-00	3	Bushing	7/8 o.d. x 3/4 l.d. x 5/8 lg.
13	83-1031-00	2	Spring	Torsion brake .121 wd
14	83-1032-00	2	Spring	Compress 1 x .177
15	84-0010-00	2	Nut	Lock Hx 1/4 NC
16	200077	2	Nut	Lock 5/16 NC nylon insert
17	84-0110-00	2	Nut	Lock Hx 3/8 NF patch
18	84-2042-00	1	Screw	BHCS 5/16 NC x 1 1/4
19	84-2355-00	2	Screw	HHC 1/4 NC x 1 1/2
20	84-3037-00	2	Washer	Flat 3/8 type N
21	84-4009-00	2	Pin	Roll, 7/32 Dia. x 1 1/4 lg.
22	84-4024-00	2	Pin	3/8 Dia. x 1 1/2 lg.

ITEM NO.	PART NO.	QTY	PART NAME	DESCRIPTION
23	84-4027-00	3	Pin	Drive, 5/16 Dia. x 1-3/8 lg.
24	84-4013-00	3	Pin	Cotter, 3/32 Dia. x 5/8 stl.
25	84-0015-00	2	Bushing	Flanged, 3/4 ID x 1/2 lg.
28	84-0109-00	4	Nut	Hx, 3/8 NF
27	84-3062-00	4	Washer	Flat, 5/8 type N
28	102748	2	Pad	Grit, brake pedal
29	10325	2	Washer	Flat, 3/8 type W
30	104244	2	Bushing	Flange, .312 ID x 3/8
31	104245	1	Bolt	Eye 10-24 x 3/8 eye
32	104246	1	Rod	Actuator, parking brake
33	104235	1	Plate	Support, parking brake
34	104237	1	Link	Parking brake
35	104243	1	Brake	Parking
36	104236	1	Lock	Parking brake
37	84-0030-00	1	Nut	Lock #10-24 nylon insert
38	102615	1	Bushing	7/8 x 3/4 x 3/8 lg.
39	10289	4	Nut	Hx 1/4 NC
40	103137	1	Spring	Extension .500 x .063
41	10285	1	Screw	HHC 5/16 NC x 1
42	104471	1	Knob	1.00 dia x 1/4-20 Thread
43	100261	1	Spring	Compress .482 x .047
44	104077	1	Nut	Jam Hx 1/4 NC

# Parts Lists and Drawings

## Brake system



# Parts Lists and Drawings

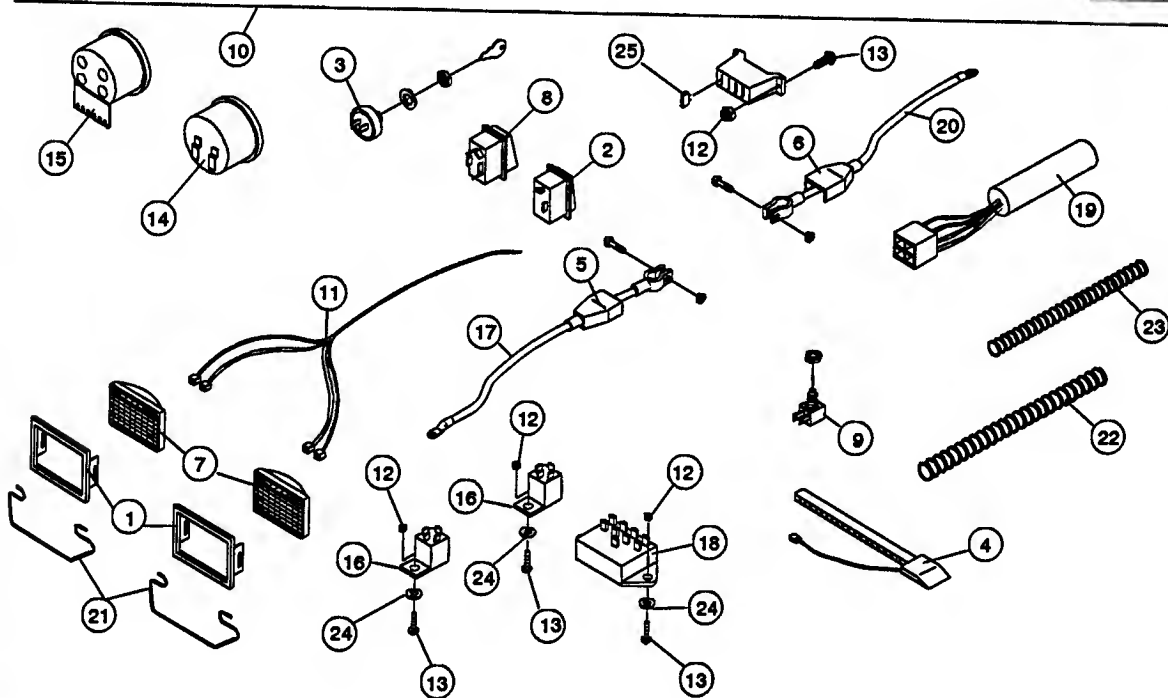
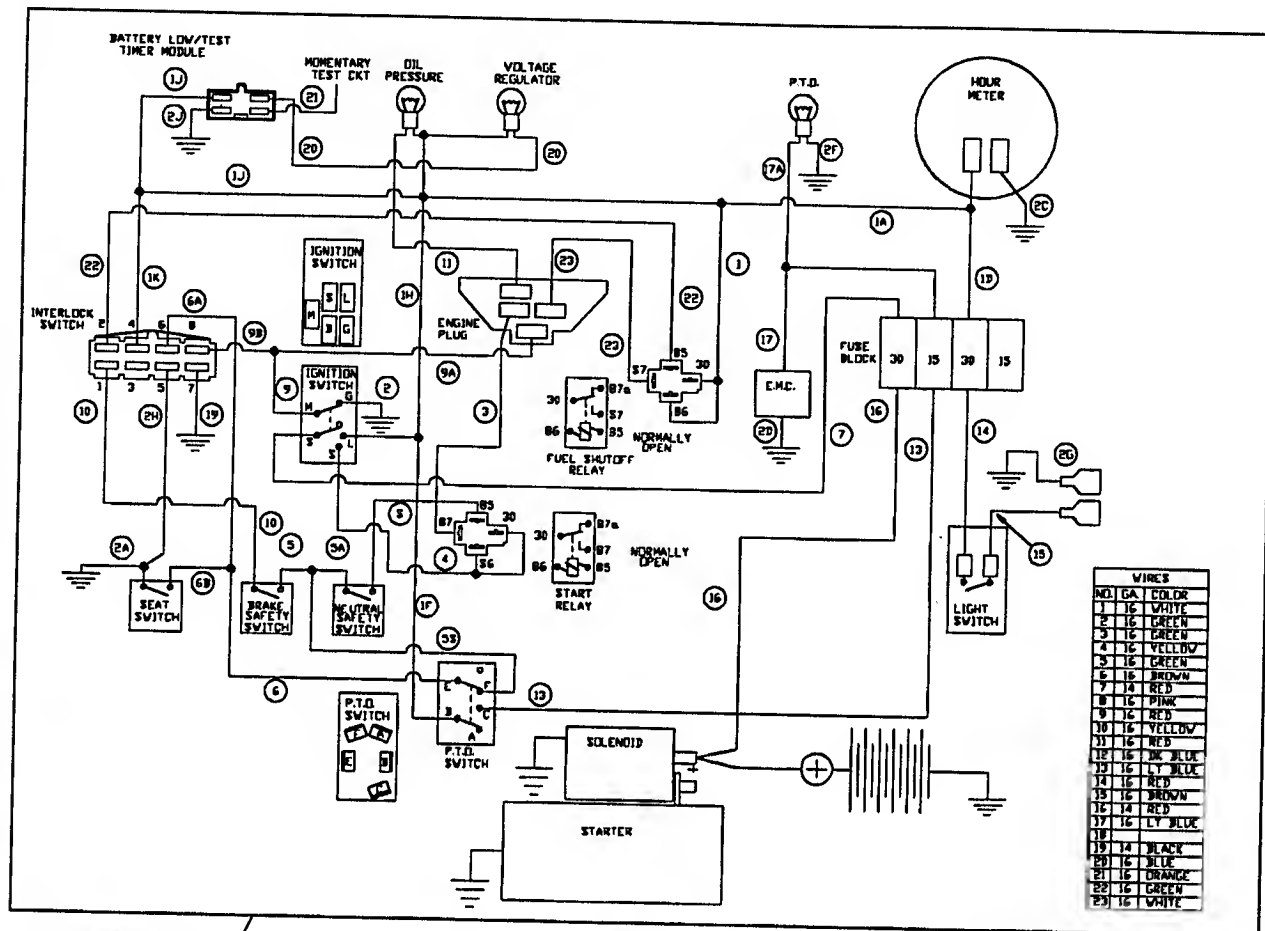
## Electrical system

ITEM NO.	PART NO.	QTY	PART NAME	DESCRIPTION
1	103949	2	Bezel .....	Lamp, snap-head
2	103964	1	Switch .....	Rocker-light
3	03-2018-00	1	Switch .....	Ignition, 3-position
4	03-2033-00	1	Switch .....	Seat, N.O. beam type
5	03-2034-00	1	Cover .....	Battery term-pos. red
6	03-2035-00	1	Cover .....	Battery term-neg. black
7	103948	2	Lamp .....	Head
8	103963	1	Switch .....	Safety toggle
9	03-7115-00	2	Switch .....	Hi/Lo, hydro/brake
10	103650	1	Harness ....	Main wiring
11	103994	1	Harness ....	Headlight
12	84-0030-00	6	Nut .....	Lock #10-24 nylon insert

ITEM NO.	PART NO.	QTY	PART NAME	DESCRIPTION
13	84-2368-00	6	Screw .....	RHM #10-24 x 3/4
14	103951	1	Meter .....	Hour
15	103950	1	Light .....	Cluster
16	104107	2	Relay .....	12VDC SPDT
17	104131	1	Cable .....	Pos. battery 30"
18	104254	1	Interlock ....	Solid stat ignition
19	104257	1	Module .....	Battery low / test timer
20	104272	1	Cable .....	Neg. battery 30"
21	104315	2	Retainer ....	Headlight
22	104369	1	Conduit .....	3.5ft., .35 corr. nylon
23	104370	1	Conduit .....	1.5ft., .50 corr. nylon
24	100920	4	Washer .....	Flat, #10
			Fuse .....	15 amp/30 amp, purchase locally

# Parts Lists and Drawings

## Electrical system



## Parts Lists and Drawings

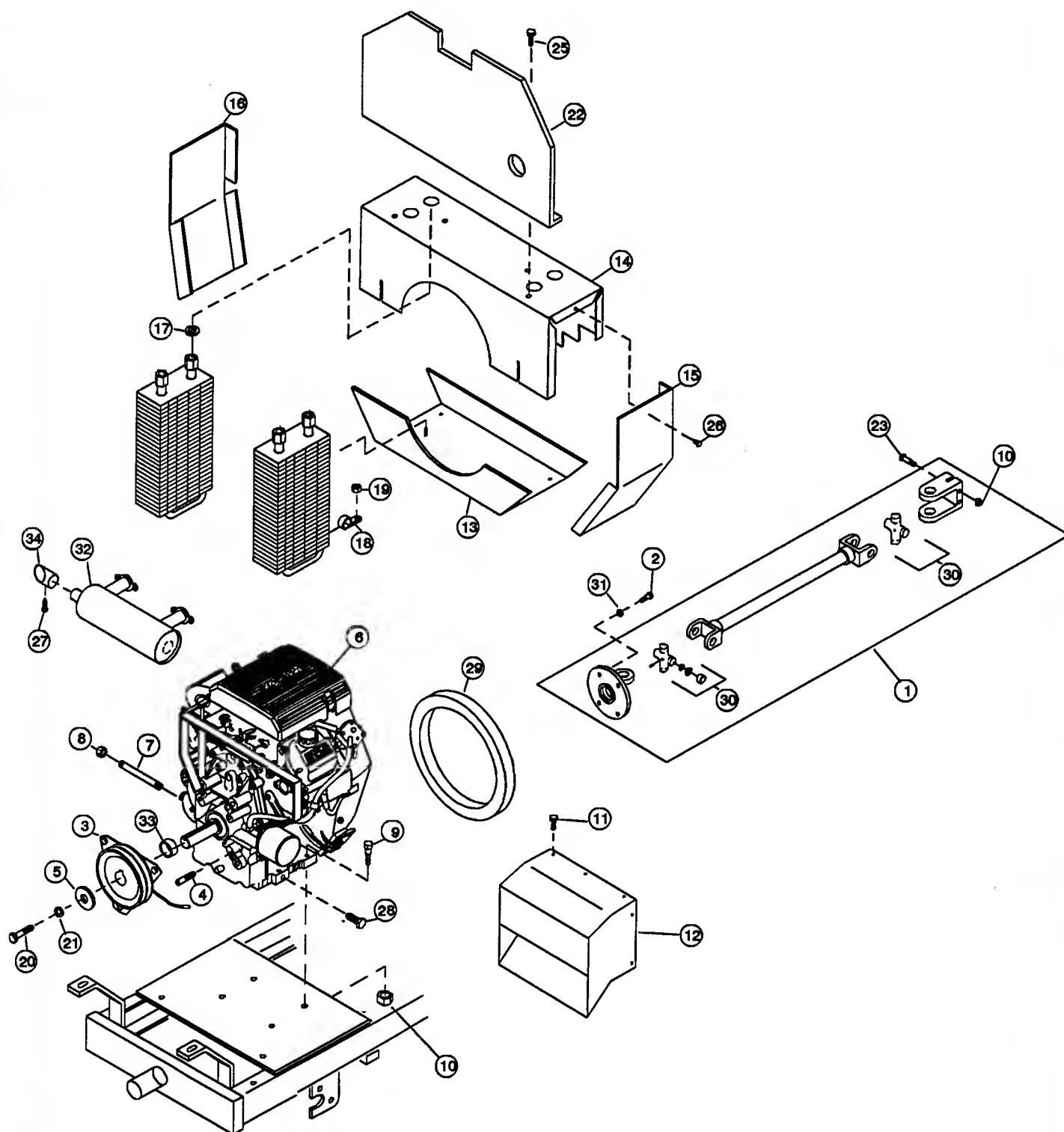
### Engine, drive shaft, baffles, and muffler

ITEM NO.	PART NO.	QTY	PART NAME	DESCRIPTION
1	103647	1	Drive Shaft ..	Command 18/20 HP
2	103707	4	Screw .....	SHC M8 x 1.25 x 30
3	103646	1	Clutch .....	EMC, bearing mounted
4	103660	1	Stud .....	3/8 NC x 1-7/16"
5	103104	1	Washer .....	1.38 x .47 x .25
6	103643	1	Engine .....	Kohler 20HP Command
7	23-7921-00	1	Fitting .....	3/8 MP nipple x 5" L
8	23-7922-00	1	Fitting cap ..	3/8 NPT female
9	84-2100-00	4	Screw .....	HHC 3/8 NC x 1 3/4
10	103124	6	Nut, flange ..	3/8 NC serrated
11	103706	7	Screw .....	HWH M6 x 1 x 12
12	103982	1	Shroud .....	Muffler, Command
13	103984	1	Baffle .....	Intake, Btm
14	103985	1	Baffle .....	Intake, Top
15	104303	1	Screen .....	Intake, LH
16	104302	1	Screen .....	Intake, RH
17	03-2513-00	4	Grommet .....	Sheet metal

ITEM NO.	PART NO.	QTY	PART NAME	DESCRIPTION
18	85-0041-00	2	Tube clamp ..	13/16 i.d., cushioned
19	200183	2	Nut .....	Flange 1/4 NC, serrated
20	84-2170-00	1	Screw .....	HHC 7/16 NF x 1 1/2
21	84-3030-00	1	Washer .....	Lock 7/16 regular
22	103986	1	Baffle .....	Isolation
23	104190	2	Screw .....	HWH 3/8 NC x 1 1/2
24	98-4002-00	2	Oil .....	Quarts, 10W30
25	104188	2	Screw .....	HWH 1/4 NC x 3/4
26	84-2370-00	8	Screw .....	HWH 1/4 NC x 1/2 tap
27	104294	1	Screw .....	No. 8 self drill
28	104196	2	Screw .....	HWH M8 x 1.25 x 16
29	104174	1	Foam .....	2" x 1/2" x 4.5'
30	09-3700-00	2	Assembly ...	Universal Joint
31	84-3020-00	4	Washer .....	Lock 3/8 reg.
32		1	Muffler	Purchase from a local Kohler dealer
33	104220	1	Spacer .....	1 1/2 x 1-1/8 x .32
34	104286	1	Pipe .....	Exhaust

## Parts Lists and Drawings

### Engine, drive shaft, baffles, and muffler



# Parts Lists and Drawings

## Hydrostatic drive

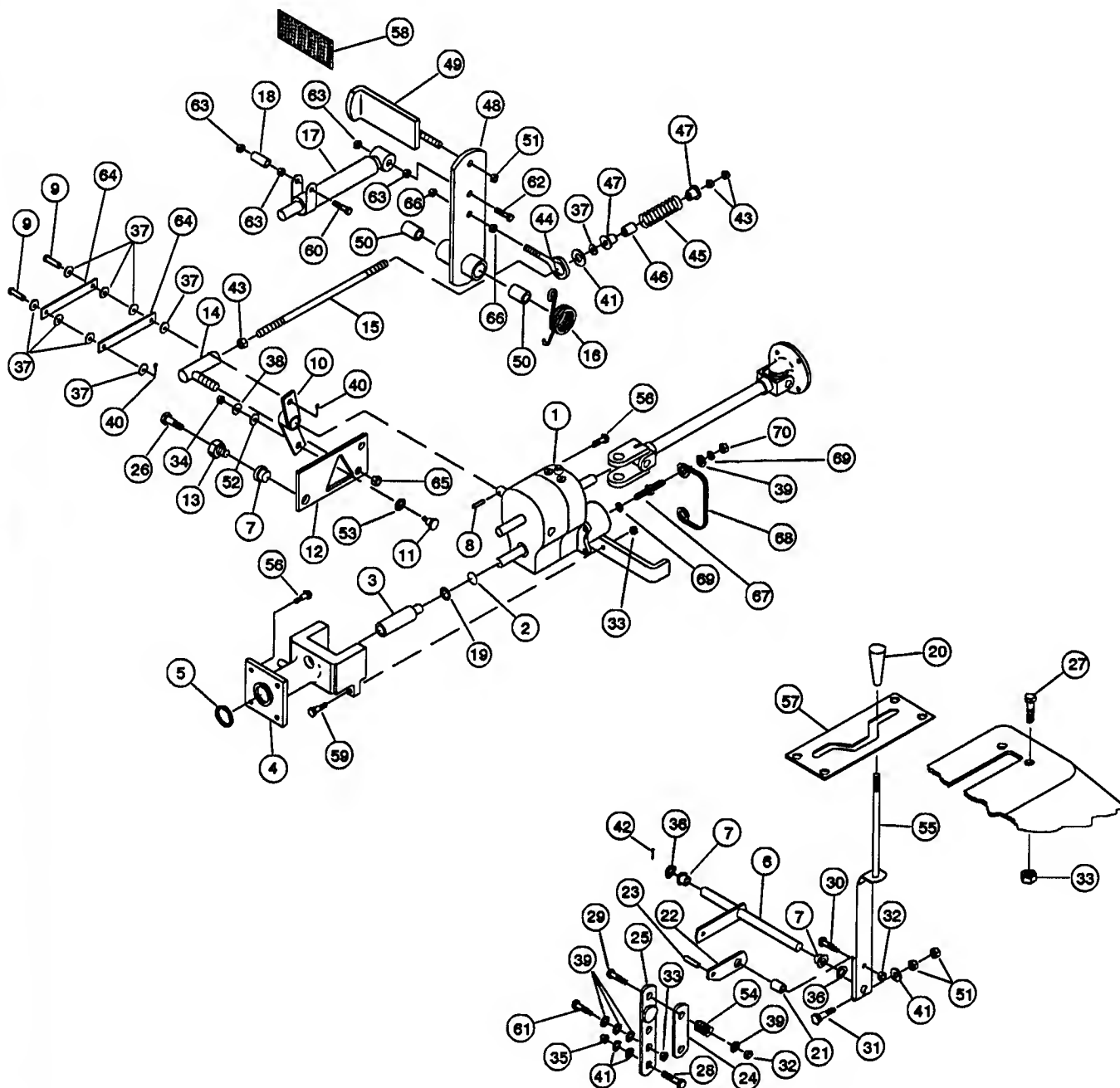
ITEM NO.	PART NO.	QTY	PART NAME	DESCRIPTION
1	03-7500-00	1	Transmission	Hydrostatic M/L
2	82-0299-00	1	Seal .....	O Ring 2.987 ID x .103
3	01-0914-00	1	Coupling ....	Hydro drive shaft
4	01-7503-00	1	Tube .....	Torque-Hydro drive
5	82-0152-00	1	Seal .....	1½ Shaft x 1.878 OD
6	01-6841-00	1	Shaft .....	Hydro control ¾ x 17.94
7	80-0015-00	3	Bushing .....	Flange ¾ ID x ½ lg.
8	84-4050-00	1	Pin .....	¼ dia x 1½ Lg. Roll
9	84-4030-00	2	Pin .....	Clevis 5/16 dia x 31x32 lg.
10	01-4713-00	1	Lever .....	Hydro trun control
11	80-0018-00	1	Bearing .....	5/8 dia track follower
12	01-8113-00	1	Plate .....	Hydro control CAM
13	01-1701-00	1	Eccentric ...	Hydro adjust
14	80-6501-00	1	Bearing .....	Rod end 5/18
15	01-6502-00	1	Rod .....	Override pedal
18	83-1031-00	1	Spring .....	Torsion brake .121 WD
17	23-0600-00	1	Damper .....	Foot pedal control
18	83-0050-00	1	Spacer .....	.750 x .357 x .750
19	83-1037-00	1	Washer .....	Spring-curved
20	03-4104-00	1	Knob .....	Shift tapered
21	80-0025-00	1	Bushing .....	.50 x .62 x .50 lg.
22	03-0520-00	1	Bar .....	Hydro Friction slider
23	84-4018-00	1	Pin .....	5/32 dia x 7/8 lg drive
24	03-0522-00	1	Bar .....	Hydro reaction assy
25	03-0521-00	1	Bar .....	Hydro friction assy
26	84-2102-00	1	Screw .....	HHC 3/8 NC x 1½
27	101088	4	Screw .....	BHSC 3/8 NC x 7/8
28	84-1063-00	1	Screw .....	HHC ½ NC x 1¼
29	84-1026-00	2	Bolt .....	Carr 3/8 NC x 2
30	84-1027-00	1	Bolt .....	Carr 3/8 NC x 1½
31	84-1032-00	1	Bolt .....	Carr ½ NC x 2½
32	84-0040-00	3	Nut .....	HX 3/8 NC center locking
33	103124	7	Nut .....	Flange 3/8 NC serrated
34	84-0009-00	1	Nut .....	Lock HX ¼ NF
35	84-0060-00	1	Nut .....	Lock HX ½ NC
36	84-3070-00	2	Washer .....	Flat ¾ type N
37	84-3012-00	9	Washer .....	Flat 5/16 type N
38	84-3090-00	1	Washer .....	Flat ¼ type N

ITEM NO.	PART NO.	QTY	PART NAME	DESCRIPTION
39	84-3037-00	7	Washer .....	Flat 3/8 type N
40	84-4013-00	2	Pin .....	Cotter 3/32 dia x 5/8 STL
41	84-3059-00	4	Washer .....	Flat ½ type N
42	84-4020-00	1	Key .....	Cotter 5/32 x 1½
43	84-0104-00	3	Nut .....	HX 5/16 NF
44	84-1003-00	1	Bolt .....	Eye "U" ¼ NC with nuts
45	83-0131-00	1	Spring .....	Compress .600 x .049
46	83-0029-00	1	Spacer .....	Split .315- .320 x .315
47	80-0030-00	2	Bushing .....	Flanged .31ID x 362 lg.
48	01-6000-00	1	Pedal .....	Clutch 16/24 M85
49	01-8112-00	1	Clutch .....	Pedal pad weldment
50	80-0017-00	2	Bushing .....	7/8 x ¾ x 5/8 Lg.
51	84-0050-00	3	Nut .....	HX ½ NC
52	84-3765-00	1	Washer .....	Lock INT/EXT ¼
53	100163	1	Washer .....	Lock INT ¼
54	101548	2	Spring .....	Compress .718 x .148
55	104179	1	Handle .....	Hydro motion control
56	103140	6	Screw .....	HWH 3/8 NC x 1
57	104268	1	Gate .....	Shift hydro 'Z'
58	101624	1	Pad .....	Grit brake pedal
59	104190	2	Screw .....	HWH 3/8 NC x 1½
60	10262	1	Screw .....	HHC 5/16 NC x 2¼
61	102712	1	Bolt .....	Carr 3/8 NC x 1¼
62	104191	1	Screw .....	HWH 5/16 NC x 1½
63	102996	4	Nut .....	Flange 5/16 NC serrated
64	104241	2	Link .....	Neutral return
65	84-0100-00	1	Nut .....	Lock Hx 5/16 NF
66	84-0101-00	2	Nut .....	Hx 5/16 NC
67	104578	2	Screw .....	Step 3/8 NC
68	104573	1	Retainer ....	Hose
69	84-3020-00	4	Washer .....	Lock 3/8 regular
70	84-0041-00	2	Nut .....	Hx 3/8 NC



# Parts Lists and Drawings

## Hydrostatic drive



# Parts Lists and Drawings

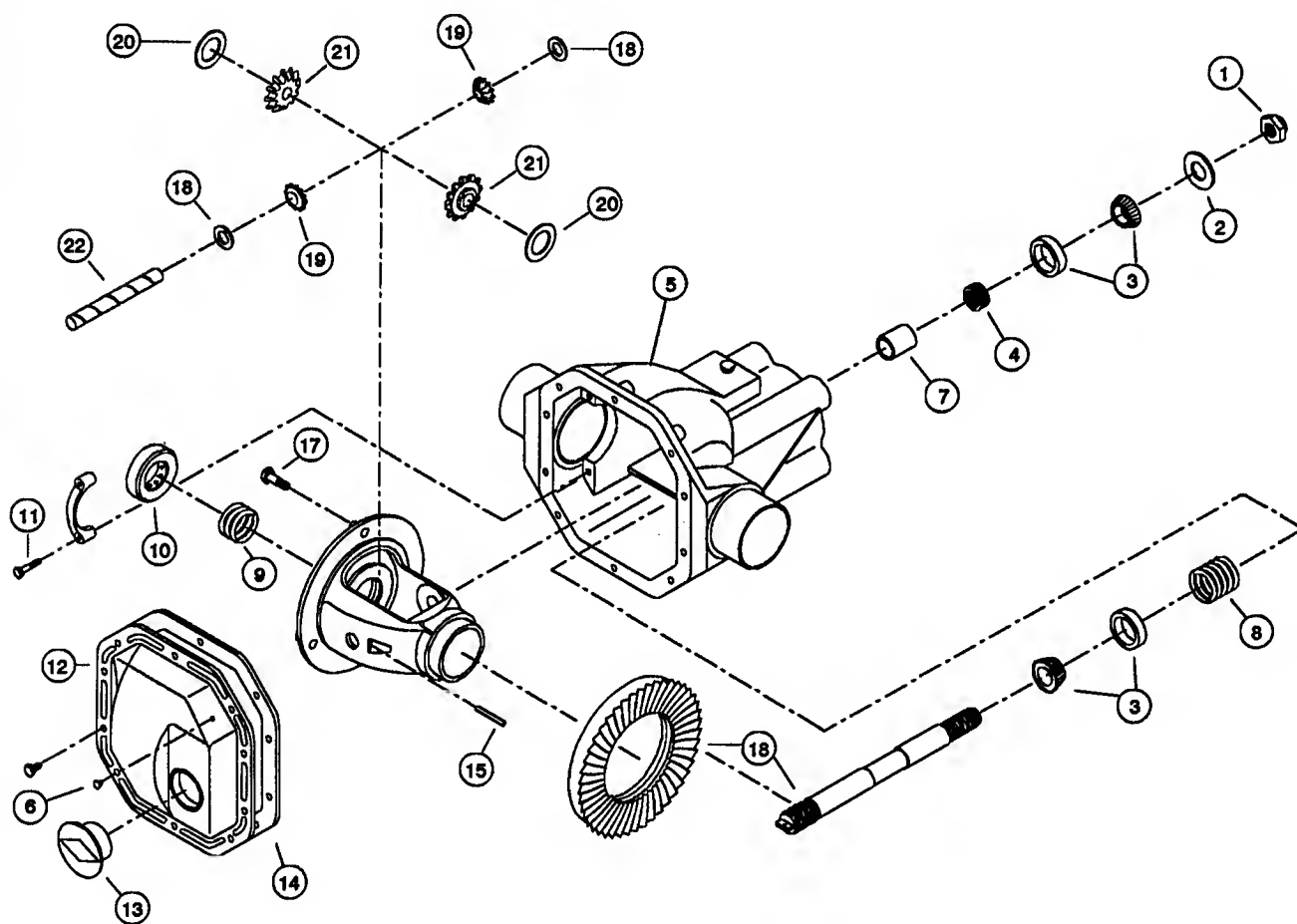
## Differential

ITEM NO.	PART NO.	QTY	PART NAME	DESCRIPTION
1	09-9333	1	Nut .....	Pinion Shaft
2	09-9354	1	Slinger .....	Oil
3	09-9322	2	Bearing .....	Cup and cone
4	09-9347	4	Shim .....	Set, front pinion
5		1	Housing .....	Differential (not serviced)
6	09-9316	1	Plug .....	Vent
7	09-9356	1	Spacer .....	Pinion bearing
8	09-9348	4	Shim .....	Set, rear pinion shaft
9	09-9349	3	Shim .....	Set
10	09-9358	2	Bearing .....	Ball
11		4	Bolt .....	Bearing cap (not serviced)
12	09-9321	1	Assembly .....	Cover, differential

ITEM NO.	PART NO.	QTY	PART NAME	DESCRIPTION
13	09-9315	1	Plug .....	Cover
14		1	Gasket .....	Cover, use silicone sealer
15		1	Pin .....	Groove (not serviced)
16	09-9334	1	Assembly .....	Gear & pinion, 5.17 :1 ratio
17	09-9346	3	Screw .....	Drive gear
18	09-9341	2	Washer .....	Pinion
19	09-9338	2	Mate .....	Pinion
20	09-9353	2	Washer .....	Thrust side gear
21	104328	2	Gear .....	Side 24 T
22	09-9340	1	Shaft .....	Pinion mate
23	102205	1	Differential .....	Complete assembly
24	98-4006	3	Lube .....	Pints, 80/90 gear

# Parts Lists and Drawings

## Differential



# Parts Lists and Drawings

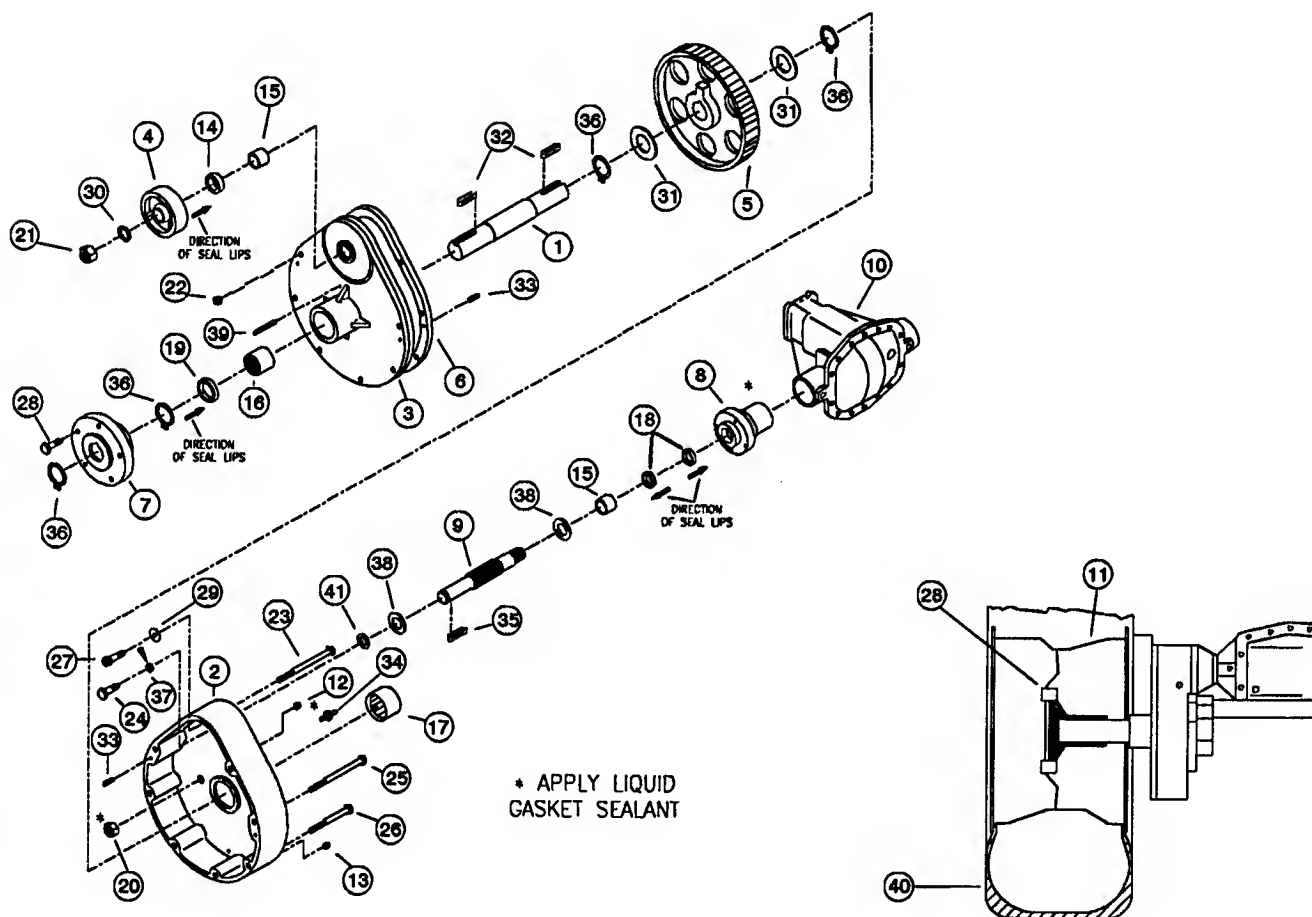
## Final drive

ITEM NO.	PART NO.	QTY	PART NAME	DESCRIPTION
1.	01-0105-00	2	Axle .....	Rear wheel
2.	01-1000-00	1	Case .....	Gear, right hand
(2)	01-1003-00	1	Case .....	Gear, left hand
3.	01-1002-00	2	Cover .....	Gear case
4.	01-1303-00	2	Drum .....	Brake, 3-29/32 OD
5.	01-2502-00	2	Gear .....	Side, 109 teeth
6.	01-2515-00	2	Gasket .....	Side cover
7.	01-2916-00	2	Hub .....	6 hole, rear wheels
8.	01-2940-00	1	Housing .....	Bearing, right side
(8)	01-2941-00	1	Housing .....	Bearing, left side
9.	102001	1	Shaft .....	Pinion, left side, 16 teeth
(9)	102002	1	Shaft .....	Pinion, right side, 16 teeth
10.	102205	1	Differential .....	5.17 : 1, alum housing
11.	03-8707-00	2	Wheel .....	Rear, 6 x 16
(11)	017540	2	Wheel & Tire ...	Rear, 15, 13½ turf tread tire
12.	23-6301-00	2	Plug .....	Pipe, ¼ vented
13.	23-6302-00	4	Plug .....	Pipe, ¼ solid
14.	101032	2	Seal .....	Pinion
15.	80-0006-00	4	Bearing .....	Roller, B1612
16.	80-0010-00	2	Bearing .....	Cover, axle bearing
17.	80-0012-00	2	Bearing .....	Case, axle bearing
18.	82-0100-00	4	Seal .....	1 ID x 1¼ OD x 1/8 W
19.	101094	2	Seal .....	1½ ID x 1-7/8 OD
20.	84-0062-00	2	Nut .....	5/8-11 hex, 45 degree

ITEM NO.	PART NO.	QTY	PART NAME	DESCRIPTION
21.	104510	2	Nut .....	¾ NC, hex oval
22.	102998	12	Nut .....	7/16 NC, hex flange
23.	84-1024-00	6	Bolt .....	Carriage, 7/16 NC x 5
24.	84-2170-00	6	Screw .....	7/16 NF x 1½, HHC
25.	104192	2	Screw .....	7/16 NC x 5½, HHC
26.	104193	4	Screw .....	7/16 NC x 4, HHC
27.	84-2240-00	2	Screw .....	7/16 NF x 1½, SHC
28.	84-2250-00	12	Screw .....	½ NF x 1-1/16 Spec.
29.	84-3031-00	2	Washer .....	7/16 High-collar, lock
30.	84-3075-00	2	Washer .....	Lock, internal tooth
31.	84-3762-00	4	Washer .....	Thrust, 1½ ID x 2¼ OD
32.	103220	4	Key .....	Square, 3/8 x 1½ lg.
33.	84-4017-00	4	Pin .....	Dowel, ¼ dia. x ½ lg.
34.	84-1166-00	2	Pin .....	Hitch, 5/8 dia. x 1-7/16 lg.
35.	84-4042-00	2	Key .....	Woodruff #9
36.	85-0150-00	8	Ring .....	Snap, 1½ external
37.	84-3030-00	6	Washer .....	Lock, 7/16
36.	80-0038-00	4	Bearing .....	Thrust race
39.	84-4052-00	2	Pin .....	Drive, ¼ dia. x 2¼ lg.
40.		2	Tire .....	Lug, 8.0-16 2-ply
(40)		2	Tire .....	Lug, 8.3-16 4-ply
(40)		2	Tire .....	Lawn, 8.0-16 2-ply
(40)		2	Tire .....	Turf, 13.5-15
41.	83-1038	2	Washer .....	Wave
42.	98-4006-003		Lube .....	Pints, 80/90 gear

# Parts Lists and Drawings

## Final drive



# Parts Lists and Drawings

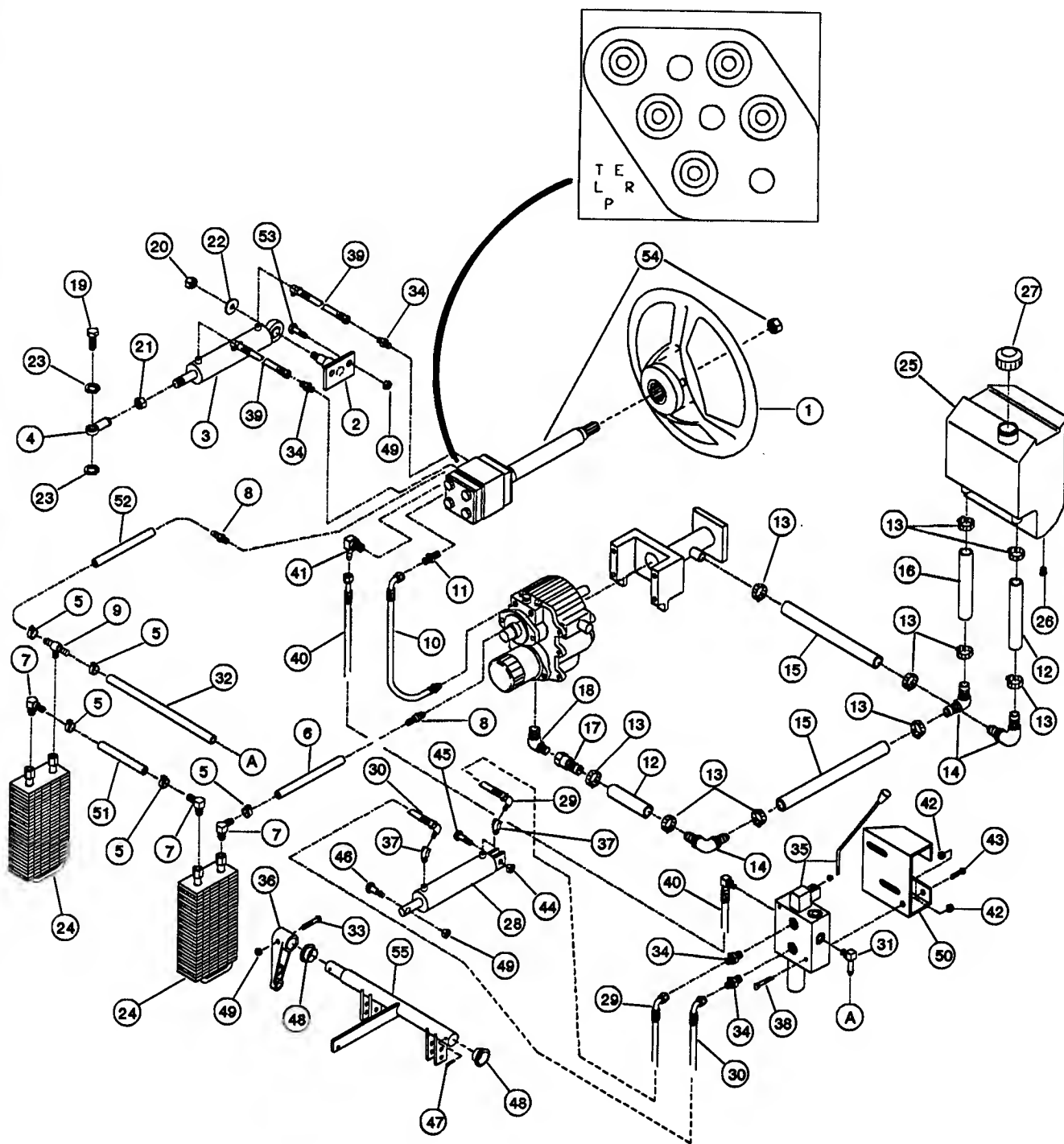
## Hydraulic plumbing and power steering

ITEM NO.	PART NO.	QTY	PART NAME	DESCRIPTION
1	103941	1	Wheel .....	Steering
2	01-0526-00	1	Bracket .....	Cylinder-steering
3	23-0907-00	1	Cylinder .....	Power steering
4	03-4108-00	1	Rod End .....	.500 UNF
5	85-0040-00	5	Clamp .....	Hose 5/8" Clinch type
8	23-2917-00	1	Hose .....	3/8 low pressure x 22"
7	23-7932-00	3	Fitting .....	3/8 MP-3/8 Barb 90°
8	23-7929-00	2	Fitting .....	3/8 MB-3/8 Barb
9	104005	1	Fitting .....	3/8 M/P x 3/8 (x2)
10	103905	1	Hose .....	Pwr str P-transmission
11	103906	1	Fitting .....	3/8MB-3/8MJ
12	23-2918-00	2	Hose .....	Stub 3/4 ID suction x 2 1/4
13	85-0043-00	10	Clamp .....	Hose
14	23-7935-00	3	Elbow .....	3/4" x 3/4" nylon
15	23-2909-00	2	Hose .....	3/4 Low pressure x 10"
16	23-2910-00	1	Hose .....	3/4 Low pressure x 6"
17	23-7909-00	1	Fitting .....	1/2 MP-3/4 Barb
18	23-7936-00	1	Fitting .....	5/8 MB-1/2 FPS
19	84-1171-00	1	Screw .....	HHC 1/2 NF x 1 1/2
20	84-0130-00	1	Nut .....	Lock HX 1/2 NF
21	84-0132-00	1	Nut .....	Jam 1/2 NF
22	84-3059-00	1	Washer .....	Flat 1/2
23	84-3110-00	2	Washer .....	Lock 1/2 regular
24	01-0918-00	2	Cooler .....	Hydraulic-oil
25	23-7601-00	1	Tank .....	Hydraulic M85
26	23-6300-00	1	Plug .....	Drain-Hyd tank
27	23-7602-00	1	Cap .....	Hyd tank M85
28	23-0905-00	1	Cylinder .....	10.5 solidram 1/2 PI

ITEM NO.	PART NO.	QTY	PART NAME	DESCRIPTION
29	104018	1	Hose .....	Valve A-CYL rear
30	104019	1	Hose .....	Valve B-CYL front
31	102673	1	Fitting .....	3/8 MB-3/8 Barb 90
32	23-2915-00	1	Hose .....	3/8 low pressure x 26
33	104187	1	Screw .....	HWH 7/18 NC x 2
34	101981	4	Fitting .....	3/8 MB-1/4 MJ
35	104050	1	Valve .....	1-Spool
36	11-0101-00	1	Arm .....	Lift HYD outboard
37	23-7914-00	2	Fitting .....	3/8 MP-3/8 FP 45°
38	102994	2	Screw .....	HWH 1/4 NC x 1
39	103998	2	Hose .....	PS cyl R/F-PS Gear
40	103995	1	Hose .....	Cntrl valve In-pwr str
41	101221	1	Fitting .....	3/8 MB-3/8 MJ 90°
42	200183	4	Nut .....	Flange 1/4 NC serrated
43	104188	2	Screw .....	HWH 1/4 NC x 3/4
44	103395	1	Nut .....	Flange 1/2 NC serrated
45	84-2227-00	1	Screw .....	HHC 1/2 NC x 2 3/4
46	102522	1	Screw .....	HHC 7/16 NC x 2 1/4
47	84-4020-00	1	Key .....	Cotter 5/32 x 1 1/2
48	80-0014-00	2	Bushing .....	Flange 1 1/4 ID
49	102998	4	Nut .....	Flange 7/16 NC
50	103848	1	Bracket .....	Valve mounting
51	103973	1	Hose .....	3/8 low pressure x 16"
52	103974	1	Hose .....	3/8 low pressure x 9 1/2"
53	104184	2	Screw .....	HWH 7/18 NC x 1 1/4
54	101980	1	Gear .....	PWR steering Eaton
55	11-6800-00	1	Shaft .....	Lift mower weldment M8
56	101353	18	Fluid .....	Transmission Dextron II

# Parts Lists and Drawings

## Hydraulic plumbing and power steering



# Parts Lists and Drawings

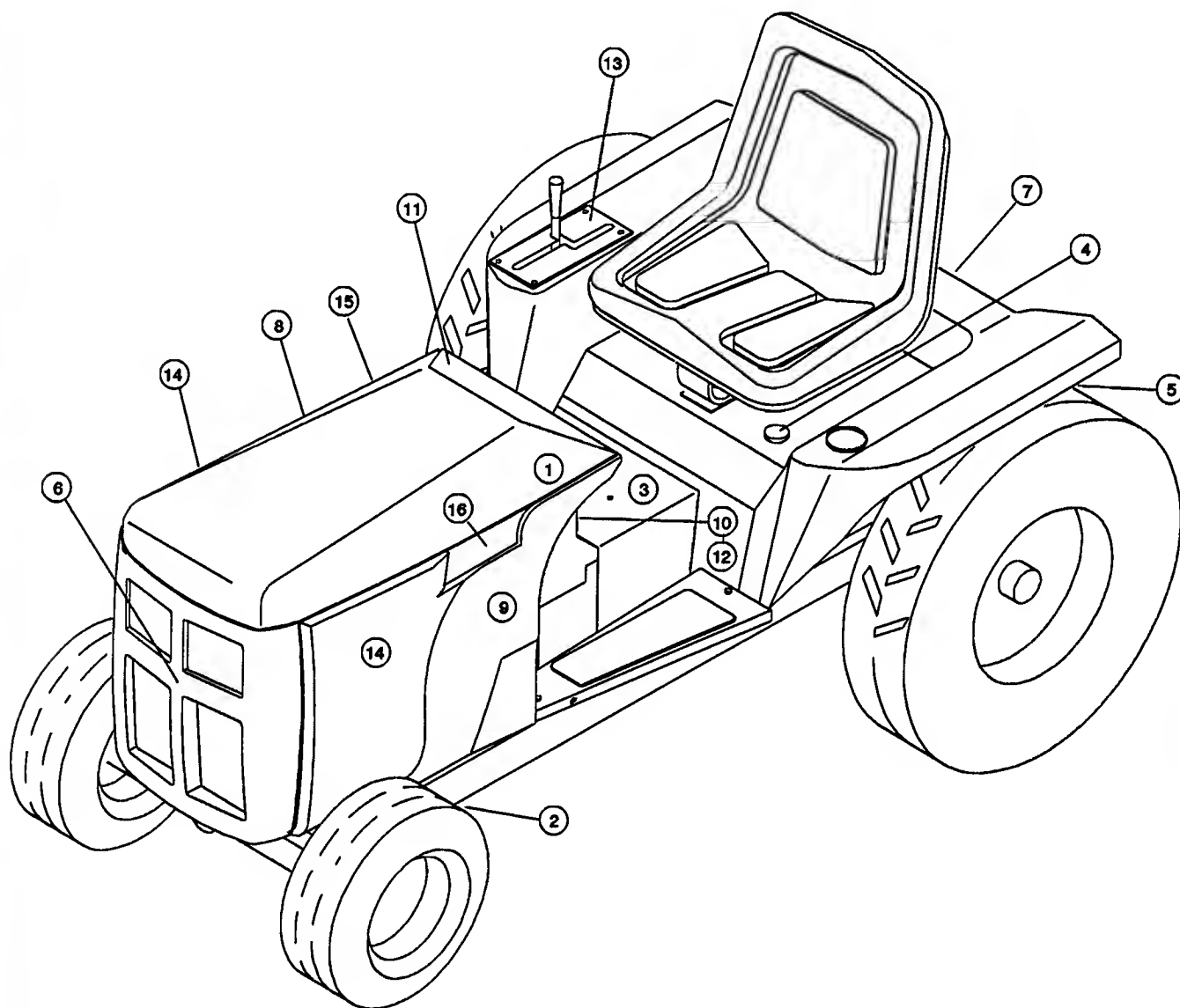
## Decals

ITEM NO.	PART NO.	QTY	PART NAME	DESCRIPTION
1	98-6968-00	1	Decal .....	Caution baffle removal (Located under hood on engine baffle)
2	98-7023-00	2	Decal .....	Danger belt pulley
3	98-6943-00	1	Decal .....	Bypass valve
4	103169	1	Decal .....	Hydraulic oil only
5	98-6971-00	1	Decal .....	Warning 3-point hitch (Located on frame at rear of tractor)
6	104145	1	Emblem .....	Grille - 1620HV
(6)	104200	1	Emblem .....	Grille - MGT2000H
7	104146	1	Emblem .....	Fender rear - 1620HV
(7)	104216	1	Emblem .....	Fender rear - MGT2000H
8	104151	1	Decal .....	RH side panel - 1620HV
(8)	104214	1	Decal .....	RH side panel - MGT2000H

ITEM NO.	PART NO.	QTY	PART NAME	DESCRIPTION
9	104152	1	Decal .....	LH side panel - 1620HV
(9)	104215	1	Decal .....	LH side panel - MGT2000H
10	104156	1	Decal .....	Lower console - 1620HV
(10)	104202	1	Decal .....	Lower console - MGT2000H
11	104158	1	Decal .....	Upper console - 1620HV
(11)	104204	1	Decal .....	Upper console - MGT2000H
12	104239	1	Decal .....	Parking brake (Located on lower slope of console)
13	104269	1	Decal .....	Shift gate
14	104407	2	Emblem .....	Side panel - 1620HV only
15	104224	1	Decal .....	RH side panel - MGT2000H
16	104223	1	Decal .....	LH side panel - MGT2000H



## Decals



# Tractor Specifications

## Tires:

Rear:	Lug, 2 ply	8.0-16			
		(31-3/4" o.d.)			
	Lug, 4 ply	8.3-16			
	Power Torque	(31-5/16" o.d.)			
	Lawn, 2 ply	8.0-16			
		(31-1/4" o.d.)			
	Turf, 4 ply rating	13.5-15			
		(30-3/4" o.d.)			
	Air Pressure	10 lbs.	18 lbs.	10 lbs.	10 lbs.
	Load Capacity/Tire	750 lbs.	850 lbs.	750 lbs.	595 lbs.
Front: Rib, 4 ply		4.0-12	4.0-12	4.0-12	
		(20-1/4" o.d.)	(20-1/4" o.d.)	(20-1/4" o.d.)	
	Lawn, 2 ply	8-10			
		(19-1/2" o.d.)			
	Air Pressure	40 lbs.	40 lbs.	40 lbs.	12 lbs.
	Load Capacity/Tire	750 lbs.	750 lbs.	750 lbs.	1450 lbs.

## Dimensions:

Length Overall	84"	84"	84"	83"
Wheelbase	58"	58"	58"	58"
Width	43-3/4"	44"	43-3/4"	54"
Tread, Rear	35-3/4"	35-3/4"	35-3/4"	41-1/2"
Tread, Front	36"	36"	36"	38-1/2"
Toe In	±1/4"	±1/4"	±1/4"	±1/4"
Tread Adjustment, Rear	±5-1/2"	±5-1/2"	±5-1/2"	0
Height (at steering wheel)	51"	51"	51"	51"
Clearance (ground to frame)	15-3/4"	15-3/4"	15-3/4"	15-3/4"
Turning Radius	43"	43"	43"	38"

## Weight:

Base Tractor with Wheels	1016 lbs.	1024 lbs.	1002 lbs.	1056 lbs.
Wheel Weight, Rear, Pair	118 lbs.	118 lbs.	118 lbs.	N/A
Wheel Weight, Front, Pair	47 lbs.	47 lbs.	47 lbs.	N/A
Suitcase Weights	50 lbs. ea.	50 lbs. ea.	50 lbs. ea.	50 lbs. ea.

## Ground speeds, mph (approx.):

Forward	0 to 7.4
Reverse	0 to 3.0

## Capacities:

Fuel Tank	8.25 Gallons (approx.) — minimum 87 octane unleaded gasoline
Engine Crankcase:	2 Quarts (approx.) — 10W30(5W30 below 32°)
Differential	2 Pints (approx.) — 80/90 gear lube
Final Drive Cases	1.5 Pints each — 80/90 gear lube
Hydraulic Tank	2.25 Gallons — Dextron II

All rights are reserved to make product improvements and to change specifications without notice or obligation.

## Tractor Specifications

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### ENGINE: Kohler® Model CH20

- 20 hp, 32 ft/lb torque at 2500 rpm.
- V-Twin cylinders with 3.03" bore and 2.64" stroke.
- 38 cu. in. displacement.
- Four-cycle, air-cooled 15 amp negative ground battery ignition.
- Spin-on filter and Oil Sentry® light.

FINAL DRIVE: Spur bull gear keyed to 1-1/2" diameter wheel axles. Reduction: 6.813:1.

ADJUSTABLE REAR TREAD WIDTH: Tread widths may be changed by reversing tires and wheels on hubs. See Dimension Table for maximum adjustments.

ELECTRICAL SYSTEM: (by Kohler) 12-volt starting motor, geared to engine flywheel. Three-position key switch, 15 amp flywheel-mounted alternator and rectifier-regulator supply 12-volt battery current. Batteries: 45 amp hr.

POWER STEERING: Eaton Mini-Series 291 Steering Control Unit. Maximum System Pressure: 1000 PSI [70 bar]. Maximum operating temperature: 200° F [93° C].

TRANSMISSION: (by KYB) Variable displacement hydrostatic. Displacement 16.4 cm<sup>3</sup>/rev.

BRAKES: Cast drum and band. Individual or combined actuation. Parking brake latch.

DIFFERENTIAL: (by Dana Corp.) Hypoid. Reduction ratio 5.17:1.

FRAME: Welded construction. Front wheel support bar 1" x 3" solid steel; pivots on 1-1/2" diameter pivot stud and two bushings.

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## Attachments and Accessories

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Refer to Chart on next page for referencing these numbers.

- ① — Also requires 803202 Mounting kit, 803801 Weight box or 803001 Rear Weight Rack with seven 101725 Suitcase Weights, 35031 36" Bucket or 35041 48" Bucket.
- ② — Requires 70004 Tiller Hitch.
- ③ — Optional: 102601 Drift Bar (pair), 102604 Super Hardened Cutting Edge, 102603 Skid Shoes — side (pair), 103158 Spring Lift Assist Kit.
- ④ — Optional: 103158 Spring Lift Assist Kit, 809501 Caster Wheel Kit.
- ⑤ — Optional: 103158 Spring Lift Assist Kit.
- ⑥ — Required to drive 70046 or 808001 Tiller Assembly.
- ⑦ — Does not fit 13.5 or 15.5 — 15 Rear Tire/Wheels.

## Attachments & Accessories

**X** = Required Part

**✓** = Optional Accessories

Refer to previous page to reference numbers 1 – 7.

Model No.	Attachment Description	Necessary Accessories								
		43001 Tool Bar	51007 Blade Hitch	60051 Mower Hitch	802901 PK/UT Conversion kit	803701 3-Pt. Hitch Cat "O"	805901 Drive Shaft	810201 Aux. lift kit rear	810901 PTO Rear	101725 Suitcase Weight 50lbs. ea.
09007	R. O. P. S.									
09012	Wheel Weights 16", Pair ⑦									
09019	Chains 8.0–16 Tires, Pair									
09022	Chains 13.5–15 Tires, Pair									
09116	16" Dual Wheel Spacer Kit ⑦									
41011	Disc Harrow with 11" Blades					X		✓		
41012	Disc Harrow with 16" Blades					X		✓		
42101	Plow with 12" Moldboard					X		✓		
43001	Tool Bar					X		✓		
43020	Disc Hillers, Pair	X				X		✓		
45010	Furrower, with 12" Shank	X				X		✓		
45020	Cultivator Kit with 6 Teeth	X				X		✓		
51003	V-Plow with Wings to 60"		X							
51540	54" Blade		X							
53001	Hay Rake 6ft.					X		✓		
56002	60" Grader Blade, Rear					X		✓		
70046	46" Rototiller (belt driven) ②					X		✓	X	
800701	54" Blade ⑤				X					
800802	51" Rotary Broom ④				X					
803001	Rear Weight Rack					X		✓		X
803102	Front End Loader ①					X		✓		
803701	3 Point Hitch, Cat. "O"							✓		
803801	Weight Box					X		✓		
806001	47" Snowblower with H'Crank ③				X		X			
807302	All Weather Cab									
808001	46" Rototiller (shaft driven)					X		✓	X	
810201	Aux. Lift Kit, Rear					X				
810801	48" Snowblower with Hitch									
810901	PTO Rear 2000 RPM ⑥									
811101	Mower, 48"			X						
811201	Mower, 60"			X						

# Maintenance Record

Use the following chart as a reference for doing maintenance and to record the dates when your tractor is serviced. The service intervals are recommended maximums and should not be exceeded. Perform maintenance more often under severe or unusual operating conditions.

Number of tractor (hourmeter) hours						
√ – check ♦ – clean ⊕ – change	Before/ during every use	After Initial 5 hours	25	50	75	100
Air cleaner	√		♦	♦	♦	⊕
Air Intake screens	√ ♦					
Air Intake/cooling system						♦
Battery		√	√	√	√	√
Belt(s)	√					
Brakes			√	√	√	√
Connections & wiring (electrical)			√	√	√	√
Differential						√
Engine oil	√	⊕				⊕
Engine oil filter		⊕				⊕
Fasteners, guards, shields	√					
Final drive						√
Fittings (grease)		√	√	√	√	√
Fuel level	√					
Fuel screen/filter						♦ ⊕
Hoses & fittings			√	√	√	√
Hydraulic oil	√					
Hydraulic oil coolers	√					
Hydraulic oil filter						⊕
Spark plugs						√
Tire pressure			√	√	√	√
Wheel bearings						♦ pack

# **SNAPPER.**

## **TWO YEAR LIMITED WARRANTY**

Snapper, through any authorized Snapper dealer, will replace, free of charge, any part or parts found upon examination by the factory, to be defective in material or workmanship or both, as follows:

- For two (2) years from purchase date for the original purchaser's residential, non-commercial use.
- For one (1) year from purchase date for the original purchaser's commercial, rental, or other non-residential use.
- For one (1) year from purchase date for any dealer tractor used for demonstration.

All transportation costs incurred by the purchaser in submitting material to the Snapper dealer for replacement under this warranty must be paid by the purchaser.

This warranty does not apply to parts that have been damaged by accident, alteration, abuse, improper lubrication, normal wear, or other cause beyond Snapper's control, nor does it cover accessories, attachments or components warranted by others, including: Engine & Engine Parts warranted by Kohler Co.; Snow Blower "Header" assemblies warranted by Haban Manufacturing Company; and Tires warranted by Goodyear Tire & Rubber Co.

There is no other express warranty.

Implied warranties, including those of merchantability and fitness for a particular purpose, are limited to two (2) years from purchase date for the original purchaser's residential, non-commercial use [one (1) year from purchase for the original purchaser's commercial, rental, or other non-residential use, and one (1) year from purchase date for dealer demonstration tractors] and to the extent permitted by law, any and all implied warranties are excluded. This is the exclusive remedy. Liabilities for incidental and consequential damages, under any and all warranties, are excluded.

Some states do not allow limitations on how long an implied warranty lasts, and/or do not allow the exclusion or limitation of incidental and consequential damages, so the above limitation and exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

**WARNING:** THE USE OF REPLACEMENT PARTS OTHER THAN GENUINE SNAPPER PARTS MAY IMPAIR THE SAFETY OF SNAPPER PRODUCTS AND WILL VOID ANY LIABILITY AND WARRANTY BY SNAPPER ASSOCIATED WITH THE USE OF SUCH PARTS.

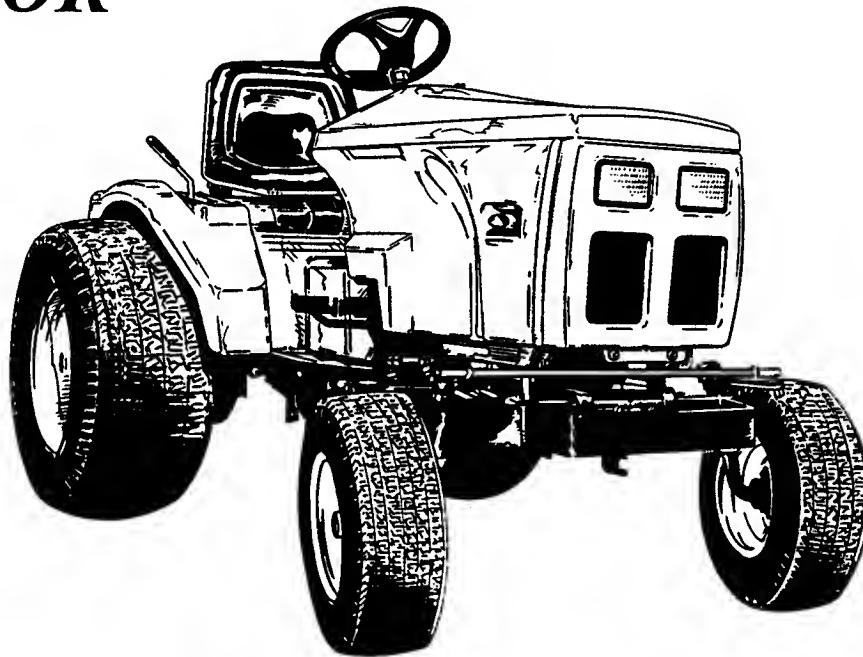
**IMPORTANT:** Please fill out the attached Snapper Product Registration Card immediately and mail to the address on the Product Registration Card.

*Safety Instructions & Operator's Manual*

# **SNAPPER®**

**MODEL MGT2000H**

**GARDEN  
TRACTOR**



**SNAPPER®** McDonough, GA., 30253 U.S.A.